L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-0300#A	The SMC shall be designed to accommodate 100 percent growth in processing speed without requiring modifications or upgrades to existing applications software.		C-HRD-16000	A	The Enterprise Monitoring Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-16010	A	The Local Management Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-26000	A	The Enterprise Communications Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-003 without modifications or upgrade to software.
			C-HRD-26010	A	The Local Communications Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-003 without modifications or upgrade to software.
SMC-0300#B	The SMC shall be designed to accommodate 100 percent growth in processing speed without requiring modifications or upgrades to existing applications software.	B: Full compliance	C-CSS-03700	B	The CSS-DCHW CI Enterprise Communications Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.
			C-CSS-03720	B	The CSS-DCHW CI Local Communications Server shall be capable of 100 percent growth in the processing speed specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.
SMC-0310#A	The SMC shall be designed to accommodate 100 percent growth in storage capacity without requiring modifications or upgrades to existing applications software.		C-HRD-16005	A	The Enterprise Monitoring Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.
			C-HRD-16015	A	The Local Management Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-003 without modifications or upgrades to software.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-26005	A	The Enterprise Communications Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-003 without modifications or upgrade to software.
			C-HRD-26015	A	The Local Communications Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-003 without modifications or upgrade to software.
SMC-0310#B	The SMC shall be designed to accommodate 100 percent growth in storage capacity without requiring modifications or upgrades to existing applications software.	B: Full compliance	C-CSS-03710	B	The CSS-DCHW CI Enterprise Communications Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.
			C-CSS-03730	B	The CSS-DCHW CI Local Communications Server shall be capable of 100 percent growth in the storage capacity specified in Appendix A of the current version of 304-CD-005 without modifications or upgrade to software.
SMC-0320#B	The SMC shall be capable of scheduling ground activities to a minimum of one minute resolution.	B: Full compliance	S-PLS-01200	A	The PLANG CI shall provide the operations staff with the capability to perform the following on-line functions, via GUI: a. Entry of product requests for standard products, b. Query / update / cancellation of production requests for standard products, c. Query status of production requests, d. Query / update of production rules and PGE information, e. Entry of plan creation requests, f. Entry of plan activation requests, g. Entry of plan cancellation requests, h. Query candidate / active plans and corresponding status, i. Entry of requests for processing log reports / production and data processing request status reports / resource utilization reports / planning workload status reports / management reports, j. Entry of ground events, k. Query / update of ground events.
SMC-0330#B	The SMC shall be capable of executing events to a minimum of one minute resolution.	B: Full compliance			

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-0340#A	The SMC shall have the capability of responding to system faults within a maximum of five minutes.	A: Partial compliance - M&O staff involved in responding to faults	C-MSS-60230	A	The MSS Fault Management Application Service shall have the capability of generating a notification within a maximum of five minutes of fault detection.
SMC-0340#B	The SMC shall have the capability of responding to system faults within a maximum of five minutes.	B: Full compliance	C-MSS-60230	A	The MSS Fault Management Application Service shall have the capability of generating a notification within a maximum of five minutes of fault detection.
SMC-0350#A	The SMC shall have the capability of responding to security compromises within a maximum of five minutes.	A: Partial compliance - M&O staff imvolved in responding to compromises	C-MSS-70460	A	The MSS site Security Management Application Service shall have the capability of generating a notification within a maximum of five minutes of the detection of an intrusion.
SMC-0350#B	The SMC shall have the capability of responding to security compromises within a maximum of five minutes.	B: Full compliance	C-MSS-70460	A	The MSS site Security Management Application Service shall have the capability of generating a notification within a maximum of five minutes of the detection of an intrusion.
SMC-1000#A	The SMC shall provide application programming interfaces (APIs) for the monitoring and control of managed resources. These APIs shall provide mechanisms for: a. Capturing, by an application, of management data b. Exchanging management data between a managed application and its management agent c. Exchanging management data between a management agent and the LSM d. Performing analyses and generating reports using management data	A: Partial/automated - except for item c.	C-MSS-12170	A	The MSS MUI Service shall provide the capability to register and unregister management applications.
			C-MSS-18200	A	The MSS Management Data Access Service shall provide the capability for an application via APIs to update fields in the management database.
			C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.
			C-MSS-36090	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS applications
			C-MSS-36110	A	The MSS Management Agent Service shall provide an ECS domain manager agent to coordinate and communicate with multiple ECS management agents.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-18330	A	The MSS Management Data Access Service shall provide the capability for an applications to append records to a log file.
			C-MSS-12040	IR1	The MSS MUI Service shall provide a capability for an application to add/delete a symbol and to modify a symbol's shape, color and position
			C-MSS-12060	IR1	The MSS MUI Service shall provide a capability for an application to add, delete, and modify text strings
			C-MSS-12140	IR1	The MSS MUI Service shall provide the capability for an application to register and unregister managed objects.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-12005	IR1	The MSS Management User Interface (MUI) Service shall be compatible with the ECS management framework.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.
			C-MSS-16110	A	The MSS monitor/control service shall provide APIs to provide the capability for management data exchange with management applications.
			C-MSS-18050	A	The MSS Management Data Access Service's shall utilize CSS Services to access/transfer management data.
			C-MSS-12010	IR1	The MSS Management User Interface (MUI) Service shall provide a graphical user interface that is OSF/MOTIF compliant
			C-MSS-12080	IR1	The MSS MUI Service shall provide a capability for applications to alert the M&O Staff
			C-MSS-12090	IR1	The MSS MUI Service shall provide a capability for applications to establish a dialog session with the M&O Staff
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1000#B	The SMC shall provide application programming interfaces (APIs) for the monitoring and control of managed resources. These APIs shall provide mechanisms for: a. Capturing, by an application, of management data b. Exchanging management data between a managed application and its management agent c. Exchanging management data between a management agent and the LSM d. Performing analyses and generating reports using management data	B: full compliance	C-MSS-12170	A	The MSS MUI Service shall provide the capability to register and unregister management applications.
			C-MSS-18200	A	The MSS Management Data Access Service shall provide the capability for an application via APIs to update fields in the management database.
			C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.
			C-MSS-36090	A	The MSS Management Agent Service shall provide an extensible ECS management agent for ECS applications
			C-MSS-36110	A	The MSS Management Agent Service shall provide an ECS domain manager agent to coordinate and communicate with multiple ECS management agents.
			C-MSS-18330	A	The MSS Management Data Access Service shall provide the capability for an applications to append records to a log file.
			C-MSS-12040	IR1	The MSS MUI Service shall provide a capability for an application to add/delete a symbol and to modify a symbol's shape, color and position
			C-MSS-12060	IR1	The MSS MUI Service shall provide a capability for an application to add, delete, and modify text strings
			C-MSS-12140	IR1	The MSS MUI Service shall provide the capability for an application to register and unregister managed objects.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-12005	IR1	The MSS Management User Interface (MUI) Service shall be compatible with the ECS management framework.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.
			C-MSS-16110	A	The MSS monitor/control service shall provide APIs to provide the capability for management data exchange with management applications.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-18050	A	The MSS Management Data Access Service's shall utilize CSS Services to access/transfer management data.
			C-MSS-12010	IR1	The MSS Management User Interface (MUI) Service shall provide a graphical user interface that is OSF/MOTIF compliant
			C-MSS-12080	IR1	The MSS MUI Service shall provide a capability for applications to alert the M&O Staff
			C-MSS-12090	IR1	The MSS MUI Service shall provide a capability for applications to establish a dialog session with the M&O Staff
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.
SMC-1300#A	The SMC shall support and maintain the ECS policies and procedures regarding instrument and ground event scheduling, including, at a minimum: a. Mission and science guidelines b. Directives for scheduling instrument data ingest, processing, reprocessing, retrieval, and data distribution	A: Full capability. Performed manually, except to the extent the staff opts to automate by using office automation tools and e-mail. THE SMC SHOULD BE ABLE TO ACCEPT EDOS PDS DELIVERY RECORDS	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

304-CD-005-002

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1300#B	The SMC shall support and maintain the ECS policies and procedures regarding instrument and ground event scheduling, including, at a minimum: a. Mission and science guidelines b. Directives for scheduling instrument data ingest, processing, reprocessing, retrieval, and data distribution	B: THE SMC SHOULD BE ABLE TO ACCEPT ADS DELIVERY RECORDS. THE SMC INTERFACE TO MAKE LONG TERM SCIENCE PLANS AND LONG TERM INSTRUMENT PLANS AVAILABLE TO THE ASTER ICC	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data
			C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.
			C-MSS-51120	B	The MSS Training Management Service shall have the capability to schedule training events.
SMC-1305#B	The LSM shall provide SMC access to scheduling information from each element.	B: Manual or semi-automated	C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.
			C-MSS-51120	B	The MSS Training Management Service shall have the capability to schedule training events.
SMC-1310#A	The SMC shall support and maintain the allocation of ground event functions and capabilities to each site and element.		S-PLS-01200	A	The PLANG CI shall provide the operations staff with the capability to perform the following on-line functions, via GUI: a. Entry of product requests for standard products, b. Query / update / cancellation of production requests for standard products, c. Query status of production requests, d. Query / update of production rules and PGE information, e. Entry of plan creation requests, f. Entry of plan activation requests, g. Entry of plan cancellation requests, h. Query candidate / active plans and corresponding status, i. Entry of requests for processing log reports / production and data processing request status reports / resource utilization reports / planning workload status reports / management reports, j. Entry of ground events, k. Query / update of ground events.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-PLS-00300	A	The PLANG CI shall accept ground events to describe the allocation of data processing resources to non-production tasks.
SMC-1310#B	The SMC shall support and maintain the allocation of ground event functions and capabilities to each site and element.		S-PLS-01200	A	The PLANG CI shall provide the operations staff with the capability to perform the following on-line functions, via GUI: a. Entry of product requests for standard products, b. Query / update / cancellation of production requests for standard products, c. Query status of production requests, d. Query / update of production rules and PGE information, e. Entry of plan creation requests, f. Entry of plan activation requests, g. Entry of plan cancellation requests, h. Query candidate / active plans and corresponding status, i. Entry of requests for processing log reports / production and data processing request status reports / resource utilization reports / planning workload status reports / management reports, j. Entry of ground events, k. Query / update of ground events.
			S-PLS-00300	A	The PLANG CI shall accept ground events to describe the allocation of data processing resources to non-production tasks.
			C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.
			C-MSS-51120	B	The MSS Training Management Service shall have the capability to schedule training events.
SMC-1315#B	The LSM shall provide each elements scheduling function with access to the system-wide scheduling information, including, at a minimum: a. ECS policies and procedures regarding instrument and ground event scheduling b. Other elements plans and schedules c. Element allocations of ground event functions and capabilities d. Product generation information e. Scheduling directives for testing, maintenance, and emergency situations	B: Full capability	C-MSS-75165	B	The Accountability Service shall have the capability to receive TDRSS schedule requests from the DSS.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1320#A	The SMC shall support and maintain priorities used in scheduling ground events.		S-PLS-00310	A	The PLANG CI specification of ground events shall include priorities, dependencies, and estimated duration.
SMC-1320#B	The SMC shall support and maintain priorities used in scheduling ground events.		S-PLS-00310	A	The PLANG CI specification of ground events shall include priorities, dependencies, and estimated duration.
			C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.
			C-MSS-51120	B	The MSS Training Management Service shall have the capability to schedule training events.
SMC-1325#B	The LSM shall provide the operations and management staff at a site or element the capability to communicate scheduling information to and receive scheduling information from the SMC, including, at a minimum: a. Routine scheduling information b. Request scheduling information c. Schedule conflict alert information d. Emergency scheduling information.	B: Full capability	S-PLS-02080	B	The PLANG CI shall provide the operations and management staff at a site the ability to send routine scheduling information to other sites.
			S-PLS-02090	B	The PLANG CI shall able to receive routine scheduling information from other sites.
			S-PLS-02100	B	The PLANG CI shall provide the operations and management staff at a site the ability to send scheduling request information to other sites.
			S-PLS-02110	B	The PLANG CI shall able to receive scheduling request information from other sites.
			S-PLS-02120	B	The PLANG CI shall provide the operations and management staff at a site the ability to send schedule conflict alert information to other sites.
			S-PLS-02130	B	The PLANG CI shall able to receive schedule conflict alert information from other sites.
			S-PLS-02140	B	The PLANG CI shall provide the operations and management staff at a site the ability to send emergency scheduling information to other sites.
			S-PLS-02150	B	The PLANG CI shall able to receive emergency scheduling information from other sites.
			S-PLS-02160	B	The PLANG CI shall be able to send routine scheduling information to other sites

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-PLS-02170	B	The PLANG CI shall be able to send scheduling request information to other sites
			S-PLS-02180	B	The PLANG CI shall be able to send schedule conflict alert information to other sites
			S-PLS-02190	B	The PLANG CI shall be able to send emergency scheduling information to other sites
SMC-1330#A	The SMC shall support and maintain the information for end-to-end data ingest, processing, reprocessing, archive, and data distribution for each product, including, at a minimum: a. Product information b. Product generation information c. Product delivery information		C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a.　Create/Delete/Get context (key) b.　List context. c.　Set/Get attributes. d.　Create/Delete attributes. e.　List attributes. f.　Set/Get attribute information.
SMC-1330#B	The SMC shall support and maintain the information for end-to-end data ingest, processing, reprocessing, archive, and data distribution for each product, including, at a minimum: a. Product information b. Product generation information c. Product delivery information	B: Full capability - semi-automated/automated. ACCEPT EDOS ARCHIVAL DATA SET (ADS) DELIVERY RECORDS	C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a.　Create/Delete/Get context (key) b.　List context. c.　Set/Get attributes. d.　Create/Delete attributes. e.　List attributes. f.　Set/Get attribute information.
			C-CSS-10820	B	The CSS DCCI shall accept mode request from MSS.
			C-CSS-10840	B	The CSS DCCI shall have the capability to send processing status to MSS.
			C-CSS-10850	B	The CSS DCCI shall have the capability to send current mode to MSS.
			C-MSS-36490	B	The Management Agent Service shall have the capability to send resource availability information to the DPS.
SMC-1335#B	The LSM shall have the capability to automatically extract, process, and send to the SMC, pertinent scheduling information.	B: Fully automated	S-PLS-02200	B	The PLANG CI shall have the capability to automatically extract pertinent scheduling information based on operator supplied criteria.
SMC-1340#A	The SMC shall generate scheduling directives for system level, site-to-site, and element-to-element integration, testing, and simulation activities.	A: Manual exchange of schedules			

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1340#B	The SMC shall generate scheduling directives for system level, site-to-site, and element-to-element integration, testing, and simulation activities.				
SMC-1345#A	The LSM shall perform priority management services to resolve conflicts for ECS resources.		S-PLS-00710	A	The PLANG CI shall create a Candidate Plan based on the following: 1. Outstanding production requests, their priorities and estimated runtimes, 2. Ground events, their priority and estimated duration, 3. Planning production rules, 4. Mutual PGE accessibility of shared data, 5. Completion notification status messages from Data Processing.
			S-PLS-00310	A	The PLANG CI specification of ground events shall include priorities, dependencies, and estimated duration.
SMC-1345#B	The LSM shall perform priority management services to resolve conflicts for ECS resources.	B: Fully automated	S-PLS-00710	A	The PLANG CI shall create a Candidate Plan based on the following: 1. Outstanding production requests, their priorities and estimated runtimes, 2. Ground events, their priority and estimated duration, 3. Planning production rules, 4. Mutual PGE accessibility of shared data, 5. Completion notification status messages from Data Processing.
			S-PLS-00310	A	The PLANG CI specification of ground events shall include priorities, dependencies, and estimated duration.
SMC-1350#B	The SMC shall generate scheduling directives for system level, site-to-site, and element-to-element maintenance activities.	B: Performed by site staff using word processor or e-mail capability	C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1360#A	The SMC shall generate ground resource scheduling directives, or recommendations for FOS elements, in response to emergency situations.		C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-1360#B	The SMC shall generate ground resource scheduling directives, or recommendations for FOS elements, in response to emergency situations.	B: Full capability (automated)	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-1500#B	The SMC shall perform schedule conflict analysis and resolution services in response to a schedule conflict involving sites, ECS elements, or external elements, agencies, or organizations, except for conflicts associated with flight operations.	B: Full capability	S-PLS-02000	B	The PLANG CI shall be able to accept scheduling information on external events which affect processing resources and operations
			S-PLS-02010	B	The PLANG CI shall identify scheduling conflicts.
			S-PLS-02020	B	The PLANG CI shall be able to provide operations personnel priorities and planned execution times of jobs causing scheduling conflicts within and between DAACs.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1600#B	The SMC shall receive product generation schedules from the DAACs and analyze the schedules for cross-DAAC dependencies (e.g., inputs that must be generated and provided by one DAAC before a product can be generated at another DAAC).	B: Full capability	S-PLS-02030	B	The PLANG CI shall identify conflicts in plans caused by cross-DAAC data dependencies.
			S-PLS-02040	B	The PLANG CI shall be able to display (via GUI) cross-DAAC data dependencies.
			S-PLS-02050	B	The PLANG CI shall be able to provide plans to PLANG CIs at other sites.
SMC-1610#B	The SMC shall recommend adjustments in the product generation schedules to ensure that product generation functions and the DAAC-to-DAAC data transfers required, are accomplished in accordance with overall mission requirements (e.g., without the development of a product generation backlog at any DAAC).	B: Full capability	S-PLS-02060	B	The PLANG CI shall be able to account for cross-DAAC data dependencies in the plans it generates.
SMC-1620#B	The SMC shall transmit the recommended schedules back to the DAACs for consideration, iterate with the DAACs as required, and develop a coordinated schedule for implementation.	B: Full capability via e-mail	S-PLS-02050	B	The PLANG CI shall be able to provide plans to PLANG CIs at other sites.
			S-PLS-02070	B	The PLANG CI shall be able to integrate multiple DAAC plans to produce a coordinated plan.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-1630#B	The SMC shall confirm that the coordinated schedule is implemented and monitor product generation and data transfers for compliance with the coordinated schedule.	B: Full capability	S-PLS-01200	A	The PLANG CI shall provide the operations staff with the capability to perform the following on-line functions, via GUI: a. Entry of product requests for standard products, b. Query / update / cancellation of production requests for standard products, c. Query status of production requests, d. Query / update of production rules and PGE information, e. Entry of plan creation requests, f. Entry of plan activation requests, g. Entry of plan cancellation requests, h. Query candidate / active plans and corresponding status, i. Entry of requests for processing log reports / production and data processing request status reports / resource utilization reports / planning workload status reports / management reports, j. Entry of ground events, k. Query / update of ground events.
SMC-2100#B	The SMC shall have the capability to generate and send ground operations (i.e., non-instrument related) events to sites and elements for implementation. Ground operations events include, at a minimum, actions associated with: a. Configuring element resources b. Fault recovery c. Security d. Maintenance e. Testing f. Simulations g. Logistics h. Training i. Accounting and accountability j. General requests for information		C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.
			C-MSS-51120	B	The MSS Training Management Service shall have the capability to schedule training events.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2105#B	The LSM shall convey ground operations (i.e., non-instrument related) events to sites or elements for implementation. Ground operations events include, at a minimum, actions associated with: a. Configuring element resources b. Fault recovery c. Security d. Maintenance e. Testing f. Simulations g. Logistics h. Training classes i. Accounting and accountability j. General requests for information		C-MSS-50235	B	The MSS Maintenance Management Service shall have the capability to schedule maintenance events via the MSS Planning and Scheduling Service.
			C-MSS-51120	B	The MSS Training Management Service shall have the capability to schedule training events.
SMC-2110#A	The SMC shall have the capability to generate managerial and operational directives affecting, at a minimum, an elements: a. Operational status b. Resource allocation c. Upgrade	A: Manually, except to the extent the staff opts to automate by using office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-2110#B	The SMC shall have the capability to generate managerial and operational directives affecting, at a minimum, an elements: a. Operational status b. Resource allocation c. Upgrade	B: full capability	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-42020	B	The MSS Software Distribution Service shall provide via the CSS Bulletin Board Service access to the toolkit repository/information.
SMC-2115#A	The LSM shall convey for site or element implementation, the managerial and operational directives regarding the allocation or upgrade of any elementÍs hardware and scientific and systems software.	A: Performed by M&O staff using office automation tools, e-mail, and phone	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-2115#B	The LSM shall convey for site or element implementation, the managerial and operational directives regarding the allocation or upgrade of any elementÍs hardware and scientific and systems software.	B: full capability	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-2120#A	The SMC shall make available for automated distribution to authorized users all unlicensed toolkit software, toolkit software upgrades, and toolkit documentation.	A: Manual. Electronic distribution, possibly automated.	C-CSS-62070	A	The CSS Bulletin Board Service shall support download of ECS toolkits.
SMC-2120#B	The SMC shall make available for automated distribution to authorized users all unlicensed toolkit software, toolkit software upgrades, and toolkit documentation.	B: Fully automated.	C-CSS-62070	A	The CSS Bulletin Board Service shall support download of ECS toolkits.
			C-MSS-42000	B	The MSS Software Distribution Service shall maintain version controlled repositories for toolkit software, software upgrades, and documentation.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-42010	B	The MSS Software Distribution Service shall have the capability to retrieve the contents for each repository from the MSS Baseline Manager Service.
			C-MSS-42020	B	The MSS Software Distribution Service shall provide via the CSS Bulletin Board Service access to the toolkit repository/information.
			C-MSS-42030	B	The MSS Software Distribution Service shall package software, databases, and documentation for delivery to destinations at both ECS and ECS-connected sites.
			C-MSS-42040	B	The MSS Software Distribution Service shall schedule via the EMC Planning and Scheduling Service automatic and operator-assisted distribution of software packages.
			C-MSS-42070	B	The MSS Software Distribution Service shall determine destinations from stored lists as well as via interactive input.
			C-MSS-42080	B	The MSS Software Distribution Service shall have the capability to push software packages from a central distribution point/depot to remote target platforms (servers and workstations).
			C-MSS-42090	B	The MSS Software Distribution Service at the site shall have the capability to pull distribution packages from central distribution points/depots onto individual target destinations.
			C-MSS-42100	B	The MSS Software Distribution Service shall initiate electronic transfer of distribution packages either automatically according to schedule or upon direct command.
			C-MSS-42110	B	The MSS Software Distribution Service shall maintain a record of successful package transfers as well as of each target that fails to receive a package intended for it.
SMC-2130#B	The SMC shall administer and distribute licenses for deployed commercial-software funded by the ECS contract, including commercial software as authorized for specific users.		C-MSS-42200	B	The MSS License Management Service shall maintain information on product identification, licensing provisions, numbers and types of users
			C-MSS-42230	B	The MSS License Management Service shall distribute software license provisions system-wide.
			C-MSS-42240	B	The MSS License Management Service shall create, install, modify, and reinstall software licenses on ECS servers.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-42250	B	The MSS License Management Service shall meter use of software licenses,
			C-MSS-42270	B	The MSS License Management Service shall have the capability to notify the M&O staff when license metering events occur.
			C-MSS-42280	B	The MSS License Management Service shall log license management events
			C-MSS-42290	B	The MSS License Management Service shall compile license utilization statistics.
			C-MSS-42300	B	The MSS License Management Service shall report license utilization statistics.
SMC-2200#A	The SMC shall assist each site or element, when necessary, in the performance of on-site preventive and corrective hardware and systems software maintenance.	Facilitation of this requirement will be described by M&O in their 611/OP3 document.			
SMC-2200#B	The SMC shall assist each site or element, when necessary, in the performance of on-site preventive and corrective hardware and systems software maintenance.	Facilitation of this requirement will be described by M&O in their 611/OP3 document.	C-MSS-50000	B	The MSS Maintenance Management Service shall provide the capability to view specified site's PM information .
			C-MSS-50010	B	The MSS Maintenance Management Service shall provide the capability to view specified site's corrective maintenance information.
			C-MSS-50020	B	The MSS Maintenance Management Service shall provide the M&O staff the capability to produce PM and corrective maintenance reports based on operator entered criteria.
			C-MSS-50030	B	The MSS Maintenance Management Service at the SMC shall have the capability to receive specified site maintenance data for use in maintenance trends analysis.
			C-MSS-50040	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print Preventive Maintenance (PM) information for site equipment.
			C-MSS-50050	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print key information concerning PM performed.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-50060	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print corrective maintenance performed (CMP) information.
			C-MSS-50070	B	The MSS Maintenance Management Service shall have the capability, via M&O Staff entered criteria, to retrieve and display information relevant to PM and corrective maintenance services previously performed.
			C-MSS-50090	B	The MSS Maintenance Management Service shall have the capability to replaced/modified equipment information maintained in the MSS Baseline Manager Service database.
			C-MSS-50100	B	The MSS Maintenance Management Service shall log the following information for operations performed and detected errors: operation type, userid of initiator, date time stamp; and host name
			C-MSS-50110	B	The MSS Maintenance Management Service shall generate chronological reports of logged events associated with user selectable: time frames; operation types; userids; and hosts.
SMC-2205#B	The LSM shall support on-site preventive and corrective hardware and systems software maintenance.		C-MSS-50040	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print Preventive Maintenance (PM) information for site equipment.
			C-MSS-50050	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print key information concerning PM performed.
			C-MSS-50060	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print corrective maintenance performed (CMP) information.
			C-MSS-50070	B	The MSS Maintenance Management Service shall have the capability, via M&O Staff entered criteria, to retrieve and display information relevant to PM and corrective maintenance services previously performed.
			C-MSS-50090	B	The MSS Maintenance Management Service shall have the capability to replaced/modified equipment information maintained in the MSS Baseline Manager Service database.
			C-MSS-50100	B	The MSS Maintenance Management Service shall log the following information for operations performed and detected errors: operation type, userid of initiator, date time stamp; and host name

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-50110	B	The MSS Maintenance Management Service shall generate chronological reports of logged events associated with user selectable: time frames; operation types; userids; and hosts.
SMC-2210#B	The SMC shall coordinate with each site or element in the management of off-site corrective hardware and systems software maintenance.		C-MSS-50120	B	The MSS Maintenance Management Service shall provide the capability to maintain sites' off-site maintenance information.
			C-MSS-50130	B	The MSS Maintenance Management Service shall provide off-site maintenance reports based on operator entered criteria.
			C-MSS-50140	B	The MSS Maintenance Management Service shall record off-site maintenance information: identification of component; description of problem; and corrective action taken.
			C-MSS-50160	B	The MSS Maintenance Management Service shall provide the capability to input off-site corrective hardware and software information.
			C-MSS-50170	B	The MSS Maintenance Management Service shall provide the capability to store off-site corrective hardware and software information.
			C-MSS-50180	B	The MSS Maintenance Management Service shall provide the capability to update off-site corrective hardware and software information.
			C-MSS-50190	B	The MSS Maintenance Management Service shall provide the capability to view off-site corrective hardware and software information.
			C-MSS-50200	B	The MSS Maintenance Management Service shall provide the capability to generate off-site maintenance reports based on operator entered criteria.
SMC-2215#B	The LSM shall coordinate with the SMC in the management of off-site corrective hardware and systems software maintenance.		C-MSS-50160	B	The MSS Maintenance Management Service shall provide the capability to input off-site corrective hardware and software information.
			C-MSS-50170	B	The MSS Maintenance Management Service shall provide the capability to store off-site corrective hardware and software information.
			C-MSS-50180	B	The MSS Maintenance Management Service shall provide the capability to update off-site corrective hardware and software information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-50190	B	The MSS Maintenance Management Service shall provide the capability to view off-site corrective hardware and software information.
			C-MSS-50200	B	The MSS Maintenance Management Service shall provide the capability to generate off-site maintenance reports based on operator entered criteria.
SMC-2220#B	The SMC shall monitor hardware and systems software maintenance status for off-site repair actions.		C-MSS-50210	B	The MSS Maintenance Management Service shall provide the capability to access a specified site's off-site maintenance repair information.
			C-MSS-50230	B	The MSS Maintenance Management Service shall provide the capability to produce maintenance status reports.
SMC-2300#A	The SMC shall monitor the spares inventory within each element.	A: Performed by M&O staff using phone and access to site's inventory status database.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2300#B	The SMC shall monitor the spares inventory within each element.	B: Semi-automated to fully automated monitoring.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45200	B	The MSS Logistics Management Service shall provide the capability to input, store, update and view/print specified site's spare inventory information.
			C-MSS-45210	B	The MSS Inventory/Logistics Management Service at the SMC shall provide the capability to produce individual site or consolidated sites spare related reports based on operator entered criteria.
			C-MSS-45220	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print information concerning site spare parts order information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-45230	B	The MSS Inventory/Logistics Management Service shall provide the capability to keep track of spares on-hand quantities, and quantity used.
			C-MSS-45240	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate site spare related reports.
SMC-2305#A	The LSM shall monitor the spares inventory within its element.		C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2305#B	The LSM shall monitor the spares inventory within its element.		C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45230	B	The MSS Inventory/Logistics Management Service shall provide the capability to keep track of spares on-hand quantities, and quantity used.
			C-MSS-45240	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate site spare related reports.
			C-MSS-45310	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print sites' consumable items orders information.
SMC-2310#A	The SMC shall oversee the replenishment of spare parts for all elements.	A: Performed by M&O staff using phone and access to site's inventory status database.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2310#B	The SMC shall oversee the replenishment of spare parts for all elements.	B: Fully automated.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45250	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print site spare parts (orders) information.
			C-MSS-45260	B	The MSS Inventory/Logistics Management Service shall have the capability to identify those items whose on-hand quantity has reached the established reorder point.
			C-MSS-45270	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate site spare parts related reports based on operator entered criteria.
SMC-2315#A	The LSM shall manage the replenishment of spare parts within its element.		C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2315#B	The LSM shall manage the replenishment of spare parts within its element.		C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45250	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print site spare parts (orders) information.
			C-MSS-45260	B	The MSS Inventory/Logistics Management Service shall have the capability to identify those items whose on-hand quantity has reached the established reorder point.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-45270	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate site spare parts related reports based on operator entered criteria.
SMC-2320#A	The SMC shall monitor the consumable inventory within each element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	A: Performed by M&O staff using phone and access to site's inventory status database.	C-HRD-11565	A	The Enterprise Monitoring Server peripherals shall support at least one CD-ROM drive.
			C-HRD-11570	A	The Enterprise Monitoring Server peripheral CD-ROM drive shall have the following characteristic: a.　　Accept 600MB Compact Disk
			C-HRD-11575	A	The Enterprise Monitoring Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-HRD-12565	A	The Local Management Server peripherals shall support at least one CD-ROM drive.
			C-HRD-12570	A	The Local Management Server peripheral CD-ROM drive shall have the following characteristic: a.　　Accept 600MB Compact Disk
			C-HRD-12575	A	The Local Management Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-HRD-21565	A	The Enterprise Communications Server peripherals shall support at least one CD-ROM drive.
			C-HRD-21570	A	The Enterprise Communications Server peripheral CD-ROM drive shall have the following characteristic: a.　　Accept 600MB Compact Disk
			C-HRD-21575	A	The Enterprise Communications Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-HRD-22565	A	The Local Communications Server peripherals shall support at least one CD-ROM drive.
			C-HRD-22570	A	The Local Communications Server peripheral CD-ROM drive shall have the following characteristic: a.　　Accept 600MB Compact Disk
			C-HRD-22575	A	The Local Communications Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-23565	A	The Bulletin Board Server peripherals shall support at least one CD-ROM drive.
			C-HRD-23570	A	The Bulletin Board Server peripheral CD-ROM drive shall have the following characteristic: a.　　　Accept 600MB Compact Disk
			C-HRD-23575	A	The Bulletin Board Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　　　simulates and displays an accountant's worksheet b.　　　enables revisions and calculations on the displayed worksheet's data c.　　　enables transfer of the worksheet data to database, word processing and graphics applications d.　　　enables printing of worksheet information.
SMC-2320#B	The SMC shall monitor the consumable inventory within each element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	B:　Manual or semi-automated.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　　　simulates and displays an accountant's worksheet b.　　　enables revisions and calculations on the displayed worksheet's data c.　　　enables transfer of the worksheet data to database, word processing and graphics applications d.　　　enables printing of worksheet information.
			C-CSS-02500	B	The CSS-DCHW CI Enterprise Communications Server peripherals shall support at least one CD-ROM drive.
			C-CSS-02510	B	The CSS-DCHW CI Enterprise Communications Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk
			C-CSS-02520	B	The CSS-DCHW CI Enterprise Communications Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-CSS-03100	B	The CSS-DCHW CI Local Communications Server peripherals shall support at least one CD-ROM drive.
			C-CSS-03110	B	The CSS-DCHW CI Local Communications Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-03120	B	The CSS-DCHW CI Local Communications Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-CSS-03600	B	The CSS-DCHW CI Bulletin Board Server peripherals shall support at least one CD-ROM drive.
			C-CSS-03610	B	The CSS-DCHW CI Bulletin Board Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk
			C-CSS-03620	B	The CSS-DCHW CI Bulletin Board Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-MSS-02500	B	The MSS-MHW CI Enterprise Monitoring Server peripherals shall support at least one CD-ROM drive.
			C-MSS-02510	B	The MSS-MHW CI Enterprise Monitoring Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk
			C-MSS-02520	B	The MSS-MHW CI Enterprise Monitoring Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-MSS-03100	B	The MSS-MHW CI Local Management Server peripherals shall support at least one CD-ROM drive.
			C-MSS-03110	B	The MSS-MHW CI Local Management Server peripheral CD-ROM drive shall have the following characteristic: a. Accept 600MB Compact Disk
			C-MSS-03120	B	The MSS-MHW CI Local Management Server peripheral CD-ROM drives shall be upgradeable/replaceable within the same product family.
			C-MSS-45245	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate order information for resupply of spare parts.
			C-MSS-45280	B	The MSS Inventory/Logistics Management Service at the SMC shall provide the capability to generate individual site or consolidated sites consumable items reports based on operator entered criteria.
			C-MSS-45290	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print site consumable item information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-45300	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate site consumable items related reports based on operator entered criteria.
SMC-2325#A	The LSM shall monitor the consumable inventory within its element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	A: Manually. Performed by M&O staff through maintaining site inventory status database.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　　simulates and displays an accountant's worksheet b.　　enables revisions and calculations on the displayed worksheet's data c.　　enables transfer of the worksheet data to database, word processing and graphics applications d.　　enables printing of worksheet information.
SMC-2325#B	The LSM shall monitor the consumable inventory within its element for items used by the system including, at a minimum: a. Computer tapes b. Computer disks c. Computer paper	B: Automated.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　　simulates and displays an accountant's worksheet b.　　enables revisions and calculations on the displayed worksheet's data c.　　enables transfer of the worksheet data to database, word processing and graphics applications d.　　enables printing of worksheet information.
			C-MSS-45290	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print site consumable item information.
			C-MSS-45300	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate site consumable items related reports based on operator entered criteria.
SMC-2330#A	The SMC shall monitor the replenishment of consumable items for all elements.	A: Performed by M&O staff using phone and access to site's inventory status database.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　　simulates and displays an accountant's worksheet b.　　enables revisions and calculations on the displayed worksheet's data c.　　enables transfer of the worksheet data to database, word processing and graphics applications d.　　enables printing of worksheet information.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2330#B	The SMC shall monitor the replenishment of consumable items for all elements.	B: Manual or semi-automated.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45310	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print sites' consumable items orders information.
			C-MSS-45320	B	The MSS Inventory/Logistics Management Service at the SMC shall provide the capability to generate individual site or consolidated sites consumable items on-order reports based on operator entered criteria.
SMC-2335#A	The LSM shall manage the replenishment of consumable items for its element.	A: Manually. Performed by M&O staff through maintaining site inventory status database.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2335#B	The LSM shall manage the replenishment of consumable items for its element.	B: Automated.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45245	B	The MSS Inventory/Logistics Management Service shall provide the capability to generate order information for resupply of spare parts.

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2400#A	The SMC shall support the management of training and certification programs for ECS.	A: Performed by M&O staff using phone and access to site's training planing do cuments.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2400#B	The SMC shall support the management of training and certification programs for ECS.	B: Capability (Requires M&O staff function as well)	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-51010	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print training information.
			C-MSS-51020	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print training records information.
			C-MSS-51030	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print site training requirements information.
SMC-2405#A	The LSM shall coordinate with the SMC in managing the training program for its element.	A: Manually. Performed by M&O staff using phone, e-mail, or through access to site's training planning documents	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
SMC-2405#B	The LSM shall coordinate with the SMC in managing the training program for its element.	B: Automated	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-51030	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print site training requirements information.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2410#A	The SMC shall provide support for the development of schedules for training courses.	A: Manually, except to the extent the staff opts to automate by using office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2410#B	The SMC shall provide support for the development of schedules for training courses.	B: Same as Rel. A. (Requires M&O staff function as well)	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-51060	B	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store, view/print, and disseminate training courses descriptions, course prerequisites, resource requirements, and schedules.
			C-MSS-51070	B	The MSS Training Management Service shall provide the capability to retrieve and view/print training courses and schedules information from a SMC training information repository.
SMC-2415#A	The LSM shall receive from the SMC descriptions and schedules for training courses.	A: Manually. Performed by M&O staff using e-mail and remote access to office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
SMC-2415#B	The LSM shall receive from the SMC descriptions and schedules for training courses.	B: Automated.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data
			C-MSS-51070	B	The MSS Training Management Service shall provide the capability to retrieve and view/print training courses and schedules information from a SMC training information repository.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2420#A	The SMC shall support the development of on-the-job training.	A: Manually, except to the extent the staff opts to automate by using office automation tools	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-2420#B	The SMC shall support the development of on-the-job training.	B: Same as Rel. A. (Requires M&O staff function as well)	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-51080	B	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store, and view/print a list of self study, supervisory, and testing requirements for each of the OJT designated ECS positions.
SMC-2430#A	The SMC shall support the development and use of training materials.	A: Manually, except to the extent the staff opts to automate by using office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2430#B	The SMC shall support the development and use of training materials.	B: Same as Rel. A. (Requires M&O staff function as well)	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-51090	B	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store copy of, and view/print training material.
			C-MSS-51100	B	The MSS Training Management Service at the SMC shall provide the capability to capture and make available suggestions/ recommendations concerning the use of training material for applicable courses.
			C-MSS-51115	B	The MSS Training Management Application Service shall make available to the MSS Inventory Management Service, any necessary information about training materials, for the purposes of maintaining these materials as inventory items.
SMC-2450#A	The SMC shall support the evaluation of the effectiveness of the training programs.	A: Manually, except to the extent the staff opts to automate by using office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2450#B	The SMC shall support the evaluation of the effectiveness of the training programs.	B: Same as Rel. A. (Requires M&O staff function as well)	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-42030	B	The MSS Software Distribution Service shall package software, databases, and documentation for delivery to destinations at both ECS and ECS-connected sites.
			C-MSS-51110	B	The MSS Training Management Service at the SMC shall provide the capability to capture, summarize, and make available course critique.
			C-CSS-61050	IR1	The CSS Electronic Mail Service shall be accessible in interactive mode.
SMC-2500#A	The SMC shall establish and maintain a system-wide inventory of all hardware, scientific and system software contained within ECS, including at a minimum: a. Hardware or software identification numbers b. Version numbers and dates c. Manufacturer d. Part number e. Serial number f. Name and locator information for software maintenance g. Location where hardware or software is used	A: Performed by the staff using inventory system	C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90140	A	The DBMS shall support, or be accessed via, CSS session-establishment services.

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2500#B	The SMC shall establish and maintain a system-wide inventory of all hardware, scientific and system software contained within ECS, including at a minimum: a. Hardware or software identification numbers b. Version numbers and dates c. Manufacturer d. Part number e. Serial number f. Name and locator information for software maintenance g. Location where hardware or software is used	B: Fully automated	C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90140	A	The DBMS shall support, or be accessed via, CSS session-establishment services.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45010	B	The MSS Inventory/Logistics Management Service at the SMC shall maintain an on-line, system-wide catalog of non-expendable and consumable ECS resources.
			C-MSS-45020	B	The MSS Inventory/Logistics Management Service at the SMC shall provide consolidated, system-wide views of ECS sites' inventory data.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-45030	B	The MSS Inventory/Logistics Management at the SMC shall track excess resources designated for reutilization or disposal.
			C-MSS-45040	B	The MSS Inventory/Logistics Management Service at the SMC shall generate site and multi-site inventory reports for printout and display.
			C-MSS-45050	B	The MSS Inventory/Logistics Management Service shall maintain inventory records of individual non-expendable and consumable ECS resources.
			C-MSS-45060	B	The MSS Inventory/Logistics Management Service shall have the capability to update and track ECS resources status.
			C-MSS-45070	B	The MSS Inventory/Logistics Management Service shall record attributes of inventoried resources.
			C-MSS-45080	B	The MSS Inventory/Logistics Management Service shall distinguish between ECS resources and non-ECS resources in the inventory.
			C-MSS-45090	B	The MSS Inventory/Logistics Management Service shall generate site inventory reports for printout and display.
SMC-2505#A	The LSM shall update the system-wide inventory data base consisting of all hardware, system software, and scientific software contained within its element.		C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-2505#B	The LSM shall update the system-wide inventory data base consisting of all hardware, system software, and scientific software contained within its element.		C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45050	B	The MSS Inventory/Logistics Management Service shall maintain inventory records of individual non-expendable and consumable ECS resources.
			C-MSS-45060	B	The MSS Inventory/Logistics Management Service shall have the capability to update and track ECS resources status.
			C-MSS-45070	B	The MSS Inventory/Logistics Management Service shall record attributes of inventoried resources.
			C-MSS-45080	B	The MSS Inventory/Logistics Management Service shall distinguish between ECS resources and non-ECS resources in the inventory.
			C-MSS-45090	B	The MSS Inventory/Logistics Management Service shall generate site inventory reports for printout and display.
			C-MSS-45220	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print information concerning site spare parts order information.
SMC-2505#Ir1	The LSM shall update the system-wide inventory data base consisting of all hardware, system software, and scientific software contained within its element.	This requirement is supported as follows: Ir1 shall provide OA tools for use by the EDF operations staff for the purpose of maintaining inventory information. Ir1 does not provide an LSM.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2510#A	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS. The management system shall support the migration of hardware and software upgrades into the operational environment.	A: SMC will have system wide configuration management and a consolidated ECS wide view. (Full capability)	C-MSS-40080	A	The MSS configuration management application service at the SMC and the sites shall maintain records describing dependencies among baseline objects.
			C-MSS-40110	A	The MSS configuration management application service shall display and report indentured, "level of assembly" lists that describe the component structure of configuration items.
			C-MSS-40120	A	The MSS configuration management application service at the SMC shall track the names and identifiers of the following items deployed at the sites: a. ECS subsystems, networks, and configured system and network devices such as workstations, servers, and routers b. ECS releases and baselines c. ECS hardware and software resources designated as configuration items d. technical documentation and test materials; e. scientific algorithms, including software, data and test materials (DAAC's only) f. algorithm processing logic control and calibration coefficients data; g. algorithm test documentation, including specifications, data files, and scripts.
			C-MSS-40140	A	The MSS configuration management application service at the SMC shall maintain, and make available system-wide, information identifying the sites where individual versions of configuration items are located and the operational status of that version at the site.
			C-MSS-40150	A	The MSS configuration management application service at the SMC shall maintain, and make available system-wide, records that identify the current and previous versions of ECS hardware and software resources deployed to the sites.
			C-MSS-40160	A	The MSS configuration management application service at the SMC shall maintain records that identify the current and previous versions of ECS documents associated with deployed ECS resources.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40170	A	The MSS configuration management application service at the SMC shall maintain, and distribute to each site, records that identify the baseline changes included in each release of ECS hardware and software deployed to the site.
			C-MSS-40180	A	The MSS configuration management application service at the SMC shall maintain, and distribute to each site, records that identify the specifications and technical, operations, and maintenance documents associated with versions of ECS hardware and software configuration items deployed to the site.
			C-MSS-40190	A	MSS configuration management application service at the SMC shall maintain, and distribute to each site, records that describe the change requests (enhancements and corrections) satisfied by new versions of ECS hardware, software, and documentation deployed to the sites.
			C-MSS-40200	A	The MSS configuration management application service at the SMC shall maintain historical status records about ECS configuration items system-wide, to include each item's: a. current version; b. current version's specifications and technical, operations, and maintenance documentation; c. specifications and technical documentation history d. "level of assembly" representation of components comprising the item's current and release configurations: e. version history
			C-MSS-40210	A	The MSS configuration management application service at the SMC shall maintain historical status records about ECS system releases, to include each release's: a. latest baseline plus approved changes. b. baseline history. c. latest release documentation. d. "level of assembly" representation of the subsystem and configuration item versions that comprise the release configuration e. history of changes, including changes to subordinate units/components. f. effectivity and installation status at operational sites. g. release configuration

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40220	A	The MSS configuration management application service at the SMC shall maintain historical status records about ECS baseline changes to include: a. sites affected; b. installation dates c. installation status.
			C-MSS-40240	A	The MSS configuration management application service at the SMC shall maintain software-critical and security-sensitive items lists.
			C-MSS-40250	A	The MSS configuration management application service at the SMC shall produce, and make available system-wide, reports containing the identity and change status of documents associated with deployed ECS resources.
			C-MSS-40260	A	The MSS configuration management application service at the SMC shall produce, and make available system-wide, reports, containing the identity and change status of individual ECS resources deployed to the sites.
			C-MSS-40270	A	The MSS configuration management application service at the SMC shall produce, and make available system-wide, reports containing the identity of resources comprising ECS baselines and releases.
			C-HRD-11110	A	The Enterprise Monitoring Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-HRD-11540	A	The Enterprise Monitoring Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-12010	A	The Local Management Server shall manage only the local DAAC and preserve other DAAC autonomy of operations.
			C-HRD-12105	A	The Local Management Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-HRD-12110	A	The Local Management Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-HRD-12540	A	The Local Management Server tape drives shall be upgradeable/replaceable within the same product family.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-HRD-13120	A	The Management Workstation shall be upgradeable/replaceable within the same product family.
			C-HRD-21105	A	The Enterprise Communications Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-HRD-21110	A	The Enterprise Communications Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-HRD-21540	A	The Enterprise Communications Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-22105	A	The Local Communications Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-HRD-22110	A	The Local Communications Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-HRD-22540	A	The Local Communications Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-23105	A	The Bulletin Board Server processor shall be upgradeable/expandable with additional quantities and types of peripherals.
			C-HRD-23110	A	The Bulletin Board Server processor shall be upgradeable/replaceable within the same product family without the need for any perturbation of any software or replacement of any peripheral or attached component.
			C-HRD-23540	A	The Bulletin Board Server tape drives shall be upgradeable/replaceable within the same product family.
			C-HRD-39005	A	The ISS-INHCI DAAC LANs shall enable expansion to GByte networks including the ability to provide increased volume of data distribution and access.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40100	A	The MSS configuration management application service at the SMC and the DAACs shall maintain SCF-provided configuration data for individual algorithms, including: a. algorithm development version numbers, identification codes, and reference numbers; b. SCF point of contact's name and organization; c. associated files' names, formats, sizes, and descriptions; d. number of files by category and type.
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40990	IR1	The MSS configuration management application service shall log the following information for configuration management events: a. operation type; b. userid of initiator; c. date-time stamp; d. host name. (IR-1, at the sites only)
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
SMC-2510#B	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS. The management system shall support the migration of hardware and software upgrades into the operational environment.	B: Semi-automated -- Inter-DAAC system wide view not provided until Rel. C	C-MSS-40080	A	The MSS configuration management application service at the SMC and the sites shall maintain records describing dependencies among baseline objects.
			C-MSS-40110	A	The MSS configuration management application service shall display and report indentured, "level of assembly" lists that describe the component structure of configuration items.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40120	A	The MSS configuration management application service at the SMC shall track the names and identifiers of the following items deployed at the sites: a.　　ECS subsystems, networks, and configured system and network devices such as workstations, servers, and routers b.　　ECS releases and baselines c.　　ECS hardware and software resources designated as configuration items d.　　technical documentation and test materials; e.　　scientific algorithms, including software, data and test materials (DAAC's only) f.　　algorithm processing logic control and calibration coefficients data; g.　　algorithm test documentation, including specifications, data files, and scripts.
			C-MSS-40140	A	The MSS configuration management application service at the SMC shall maintain, and make available system-wide, information identifying the sites where individual versions of configuration items are located and the operational status of that version at the site.
			C-MSS-40150	A	The MSS configuration management application service at the SMC shall maintain, and make available system-wide, records that identify the current and previous versions of ECS hardware and software resources deployed to the sites.
			C-MSS-40160	A	The MSS configuration management application service at the SMC shall maintain records that identify the current and previous versions of ECS documents associated with deployed ECS resources.
			C-MSS-40170	A	The MSS configuration management application service at the SMC shall maintain, and distribute to each site, records that identify the baseline changes included in each release of ECS hardware and software deployed to the site.
			C-MSS-40180	A	The MSS configuration management application service at the SMC shall maintain, and distribute to each site, records that identify the specifications and technical, operations, and maintenance documents associated with versions of ECS hardware and software configuration items deployed to the site.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40190	A	MSS configuration management application service at the SMC shall maintain, and distribute to each site, records that describe the change requests (enhancements and corrections) satisfied by new versions of ECS hardware, software, and documentation deployed to the sites.
			C-MSS-40200	A	The MSS configuration management application service at the SMC shall maintain historical status records about ECS configuration items system-wide, to include each item's: a. current version; b. current version's specifications and technical, operations, and maintenance documentation; c. specifications and technical documentation history d. "level of assembly" representation of components comprising the item's current and release configurations: e. version history
			C-MSS-40210	A	The MSS configuration management application service at the SMC shall maintain historical status records about ECS system releases, to include each release's: a. latest baseline plus approved changes. b. baseline history. c. latest release documentation. d. "level of assembly" representation of the subsystem and configuration item versions that comprise the release configuration e. history of changes, including changes to subordinate units/components. f. effectivity and installation status at operational sites. g. release configuration
			C-MSS-40220	A	The MSS configuration management application service at the SMC shall maintain historical status records about ECS baseline changes to include: a. sites affected; b. installation dates c. installation status.
			C-MSS-40240	A	The MSS configuration management application service at the SMC shall maintain software-critical and security-sensitive items lists.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40250	A	The MSS configuration management application service at the SMC shall produce, and make available system-wide, reports containing the identity and change status of documents associated with deployed ECS resources.
			C-MSS-40260	A	The MSS configuration management application service at the SMC shall produce, and make available system-wide, reports, containing the identity and change status of individual ECS resources deployed to the sites.
			C-MSS-40270	A	The MSS configuration management application service at the SMC shall produce, and make available system-wide, reports containing the identity of resources comprising ECS baselines and releases.
			C-MSS-40100	A	The MSS configuration management application service at the SMC and the DAACs shall maintain SCF-provided configuration data for individual algorithms, including: a. algorithm development version numbers, identification codes, and reference numbers; b. SCF point of contact's name and organization; c. associated files' names, formats, sizes, and descriptions; d. number of files by category and type.
			C-CSS-02110	B	The CSS-DCHW CI Enterprise Communications Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-CSS-02120	B	The CSS-DCHW CI Enterprise Communications Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-CSS-02710	B	The CSS-DCHW CI Local Communications Server processor shall be capable of expansion with additional quantities and types of peripherals.
			C-CSS-02720	B	The CSS-DCHW CI Local Communications Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-CSS-03310	B	The CSS-DCHW CI Bulletin Board Server processor shall be upgradeable/expandable with additional quantities and types of peripherals.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-03320	B	The CSS-DCHW CI Bulletin Board Server processor shall be upgradeable/replaceable within the same product family without the need for any perturbation of any software or replacement of any peripheral or attached component.
			C-MSS-02120	B	The MSS-MHW CI Enterprise Monitoring Server processor shall be upgradeable/replaceable within the same product family without major software modification or replacement of any peripheral or attached component.
			C-MSS-02430	B	The MSS-MHW CI Enterprise Monitoring Server tape drives shall be upgradeable/replaceable within the same product family.
			C-MSS-92630	B	The MSS Report Generation Service shall be capable of generating an SNMP Event Notification report identifying the IP address(es) of the management system(s) to which the selected node is configured to send SNMP events.
			C-MSS-92640	B	The MSS Report Generation Service shall be capable of generating an Indentured Level of Assembly List Report for all managed configuration items (CIs).
			C-MSS-92650	B	The MSS Report Generation Service shall be capable of generating a Document Configuration Status Report containing the identity and status of documents associated with ECS resources.
			C-MSS-92660	B	The MSS report generation service shall be capable of generating a System Configuration Tracking Report noting the migration of upgrades into the operational environment.
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40990	IR1	The MSS configuration management application service shall log the following information for configuration management events: a. operation type; b. userid of initiator; c. date-time stamp; d. host name. (IR-1, at the sites only)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
SMC-2510#Ir1	The SMC shall provide at a minimum system-wide configuration management for the operational hardware, scientific and system software, and the SMC toolkit contained within ECS.	CM for SS/W at sites, EDF CM for all IR1 H/W and S/W Enhancements via Ops.	C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40470	IR1	The MSS configuration management application service shall regulate operations on software library files through use of individual and group permissions.
			C-MSS-40480	IR1	The MSS configuration management application service shall use a checkout/edit/checkin paradigm to govern changing of software library files.
			C-MSS-40490	IR1	The MSS configuration management application service shall track each software library file that has been changed as a new version of the original file.
			C-MSS-40500	IR1	The MSS configuration management application service shall merge versions of software library files and identify version conflicts, if any.
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40550	IR1	The MSS configuration management application service shall reconstruct previous versions of software library files.
			C-MSS-40560	IR1	The MSS configuration management application service shall allow concurrent user access to software library files.
			C-MSS-40570	IR1	The MSS configuration management application service shall maintain an audit trail of all changes made to software library files.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2515#A	The LSM shall provide configuration management for at least the operational hardware, system software, and scientific software within its element and for the migration of enhancements into the operational system.		C-MSS-40030	A	The MSS configuration management application service at each site shall make available to the SMC records that identify the site's operational baseline and the versions and implementation status of configuration controlled resources that comprise it.
			C-MSS-40040	A	The MSS configuration management application service at each site shall make available to the SMC, "level of assembly" records that describe the composition of configuration items at the site.
			C-MSS-40060	A	The MSS configuration management application service at each site shall maintain historical status records about ECS configuration items at the site, identifying each item's: a. current version; b. current version's specifications and technical, operations, and maintenance documentation; c. specification and technical documentation history; d. "level of assembly" representation of the components comprising the items current and release configurations e. version history
			C-MSS-40070	A	The MSS configuration management application service at the SMC and the sites shall maintain records that establish traceability among operational baselines and releases.
			C-MSS-40080	A	The MSS configuration management application service at the SMC and the sites shall maintain records describing dependencies among baseline objects.
			C-MSS-40110	A	The MSS configuration management application service shall display and report indentured, "level of assembly" lists that describe the component structure of configuration items.
			C-MSS-40460	A	The MSS configuration management application service at the SMC shall assemble unlicensed toolkit software files for posting to the ECS bulletin board. Files consist of: a. source code; b. linkable object code for selected workstation configurations; c. makefiles that automate installation; d. installation instructions.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40600	A	The MSS configuration management application service shall provide a capability with which to specify a need for ECS system changes, both for enhancing system capabilities and for correcting non-conformance with system requirements.
			C-MSS-40610	A	The MSS configuration management application service shall store copies of non-conformance reports and requests to modify ECS components and configurations.
			C-MSS-40620	A	The MSS configuration management application service at the sites shall provide a capability with which to forward non-conformance reports and requests for ECS configuration changes to the SMC.
			C-MSS-40280	A	The MSS configuration management application service shall characterize ECS-controlled resources as system-wide or site-specific.
			C-MSS-40290	A	The MSS configuration management application service shall accept and store baseline management data records provided via interactive user interface and formatted data files.
			C-MSS-40300	A	The MSS configuration management application service shall produce formatted data files containing baseline management data records.
			S-DPS-42180	IR1	The operations staff shall check source code, coefficient files, test plans, test data, expected test results and other documentation into the Configuration Management tool.
			S-DPS-42190	IR1	The operations staff (and others who are specifically authorized) shall have the capability to check out source code, coefficient files, test plans, test data, expected test results and other documentation from the Configuration Management tool.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40000	A	The MSS configuration management application service at each site shall track the following items at the site by name and identifier: a.　ECS subsystems, networks, and configured system and network devices such as workstations, servers, and routers b.　ECS releases and site baselines c.　ECS hardware and software resources designated as configuration items d.　specifications asscoiated with configuration items e.　technical documentation and test materials f.　scientific algorithms, including software, data and test materials (DAACs only)
			C-MSS-40010	A	The MSS configuration management application service at each site shall identify versions and variants of configuration controlled resources that comprise the site's operational baseline.
			C-MSS-40100	A	The MSS configuration management application service at the SMC and the DAACs shall maintain SCF-provided configuration data for individual algorithms, including: a.　algorithm development version numbers, identification codes, and reference numbers; b.　SCF point of contact's name and organization; c.　associated files' names, formats, sizes, and descriptions; d.　number of files by category and type.
			C-MSS-40400	IR1	The MSS configuration management application service at the sites and the SMC shall maintain software libraries to store files containing versions and platform variants of: a.　source code; b.　binaries and executables; c.　patches; d.　calibration coefficients and control data; e.　scripts; f.　designs and design specifications; g.　databases; h.　technical documentation (both text and graphics); i.　test data; j.　test reports; k.　interface specifications; l.　configuration data. (IR-1)

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40420	IR1	The MSS configuration management application service at each site shall maintain M&O staff-definable software configuration status information for each version of every software library file.
			C-MSS-40990	IR1	The MSS configuration management application service shall log the following information for configuration management events: a. operation type; b. userid of initiator; c. date-time stamp; d. host name. (IR-1, at the sites only)
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
SMC-2515#B	The LSM shall provide configuration management for at least the operational hardware, system software, and scientific software within its element and for the migration of enhancements into the operational system.		C-MSS-40030	A	The MSS configuration management application service at each site shall make available to the SMC records that identify the site's operational baseline and the versions and implementation status of configuration controlled resources that comprise it.
			C-MSS-40040	A	The MSS configuration management application service at each site shall make available to the SMC, "level of assembly" records that describe the composition of configuration items at the site.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40060	A	The MSS configuration management application service at each site shall maintain historical status records about ECS configuration items at the site, identifying each item's: a. current version; b. current version's specifications and technical, operations, and maintenance documentation; c. specification and technical documentation history; d. "level of assembly" representation of the components comprising the items current and release configurations e. version history
			C-MSS-40070	A	The MSS configuration management application service at the SMC and the sites shall maintain records that establish traceability among operational baselines and releases.
			C-MSS-40080	A	The MSS configuration management application service at the SMC and the sites shall maintain records describing dependencies among baseline objects.
			C-MSS-40110	A	The MSS configuration management application service shall display and report indentured, "level of assembly" lists that describe the component structure of configuration items.
			C-MSS-40460	A	The MSS configuration management application service at the SMC shall assemble unlicensed toolkit software files for posting to the ECS bulletin board. Files consist of: a. source code; b. linkable object code for selected workstation configurations; c. makefiles that automate installation; d. installation instructions.
			C-MSS-40600	A	The MSS configuration management application service shall provide a capability with which to specify a need for ECS system changes, both for enhancing system capabilities and for correcting non-conformance with system requirements.
			C-MSS-40610	A	The MSS configuration management application service shall store copies of non-conformance reports and requests to modify ECS components and configurations.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40620	A	The MSS configuration management application service at the sites shall provide a capability with which to forward non-conformance reports and requests for ECS configuration changes to the SMC.
			C-MSS-40280	A	The MSS configuration management application service shall characterize ECS-controlled resources as system-wide or site-specific.
			C-MSS-40290	A	The MSS configuration management application service shall accept and store baseline management data records provided via interactive user interface and formatted data files.
			C-MSS-40300	A	The MSS configuration management application service shall produce formatted data files containing baseline management data records.
			S-DPS-42180	IR1	The operations staff shall check source code, coefficient files, test plans, test data, expected test results and other documentation into the Configuration Management tool.
			S-DPS-42190	IR1	The operations staff (and others who are specifically authorized) shall have the capability to check out source code, coefficient files, test plans, test data, expected test results and other documentation from the Configuration Management tool.
			C-MSS-40000	A	The MSS configuration management application service at each site shall track the following items at the site by name and identifier: a. ECS subsystems, networks, and configured system and network devices such as workstations, servers, and routers b. ECS releases and site baselines c. ECS hardware and software resources designated as configuration items d. specifications asscoiated with configuration items e. technical documentation and test materials f. scientific algorithms, including software, data and test materials (DAACs only)
			C-MSS-40010	A	The MSS configuration management application service at each site shall identify versions and variants of configuration controlled resources that comprise the site's operational baseline.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40100	A	The MSS configuration management application service at the SMC and the DAACs shall maintain SCF-provided configuration data for individual algorithms, including: a. algorithm development version numbers, identification codes, and reference numbers; b. SCF point of contact's name and organization; c. associated files' names, formats, sizes, and descriptions; d. number of files by category and type.
			C-MSS-40400	IR1	The MSS configuration management application service at the sites and the SMC shall maintain software libraries to store files containing versions and platform variants of: a. source code; b. binaries and executables; c. patches; d. calibration coefficients and control data; e. scripts; f. designs and design specifications; g. databases; h. technical documentation (both text and graphics); i. test data; j. test reports; k. interface specifications; l. configuration data. (IR-1)
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40420	IR1	The MSS configuration management application service at each site shall maintain M&O staff-definable software configuration status information for each version of every software library file.
			C-MSS-40990	IR1	The MSS configuration management application service shall log the following information for configuration management events: a. operation type; b. userid of initiator; c. date-time stamp; d. host name. (IR-1, at the sites only)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
SMC-2515#Ir1	The LSM shall provide configuration management for at least the operational hardware, system software, and scientific software within its element and for the migration of enhancements into the operational system.	Ir1: This requirement is supported as follows: IR-1 shall provide configuration management for the Science Software at the DAACs. IR-1 does not provide an LSM.	S-DPS-42180	IR1	The operations staff shall check source code, coefficient files, test plans, test data, expected test results and other documentation into the Configuration Management tool.
			S-DPS-42190	IR1	The operations staff (and others who are specifically authorized) shall have the capability to check out source code, coefficient files, test plans, test data, expected test results and other documentation from the Configuration Management tool.
			C-MSS-40400	IR1	The MSS configuration management application service at the sites and the SMC shall maintain software libraries to store files containing versions and platform variants of: a. source code; b. binaries and executables; c. patches; d. calibration coefficients and control data; e. scripts; f. designs and design specifications; g. databases; h. technical documentation (both text and graphics); i. test data; j. test reports; k. interface specifications; l. configuration data. (IR-1)
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40420	IR1	The MSS configuration management application service at each site shall maintain M&O staff-definable software configuration status information for each version of every software library file.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40990	IR1	The MSS configuration management application service shall log the following information for configuration management events: a. operation type; b. userid of initiator; c. date-time stamp; d. host name. (IR-1, at the sites only)
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
SMC-2520#A	The SMC shall evaluate received system enhancement requests to determine, at a minimum: a. Technical feasibility b. Implementation schedule c. Expected costs d. Existing system-wide hardware and software impacts	A: Performed by staff using various CM and other tools	C-MSS-40650	A	The MSS configuration management application service at the SMC shall receive configuration change requests and non-conformance reports in electronic form from the sites.
			C-MSS-40660	A	The MSS configuration management application service at the SMC shall distribute change evaluation requests to designated organizations system-wide and record evaluation assignments and distribution status.
			C-MSS-40670	A	The MSS configuration management application service at the SMC shall receive and store impact assessments in response to change evaluation requests.
			C-MSS-40680	A	The MSS configuration management service at the SMC shall electronically link impact assessments to their associated change requests.
			C-MSS-40690	A	The MSS configuration management application service at the SMC shall maintain the status of responses to change evaluation requests.
			C-MSS-40700	A	The MSS configuration management application service at the SMC shall record summaries of impact assessments received.
			C-MSS-40720	A	The MSS configuration management application service at the SMC shall make non-conformance reports, configuration change requests, assessments, and status available for system-wide viewing.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40730	A	The MSS configuration management application service at the SMC shall maintain historical records of ECS configuration change requests, non-conformance reports, and system impact assessments.
			C-MSS-40750	A	The MSS configuration management application service at the SMC shall track approval and closure status of configuration change requests and non-conformance reports.
			C-MSS-40760	A	The MSS configuration management application service at the SMC shall report, and make available system-wide lists of the identity and disposition of configuration change requests and non-conformance reports against ECS baselines.
SMC-2520#B	The SMC shall evaluate received system enhancement requests to determine, at a minimum: a. Technical feasibility b. Implementation schedule c. Expected costs d. Existing system-wide hardware and software impacts	B: Automated receipt of requests for enhancements using CM tools or office automation applications	C-MSS-40650	A	The MSS configuration management application service at the SMC shall receive configuration change requests and non-conformance reports in electronic form from the sites.
			C-MSS-40660	A	The MSS configuration management application service at the SMC shall distribute change evaluation requests to designated organizations system-wide and record evaluation assignments and distribution status.
			C-MSS-40670	A	The MSS configuration management application service at the SMC shall receive and store impact assessments in response to change evaluation requests.
			C-MSS-40680	A	The MSS configuration management service at the SMC shall electronically link impact assessments to their associated change requests.
			C-MSS-40690	A	The MSS configuration management application service at the SMC shall maintain the status of responses to change evaluation requests.
			C-MSS-40700	A	The MSS configuration management application service at the SMC shall record summaries of impact assessments received.
			C-MSS-40720	A	The MSS configuration management application service at the SMC shall make non-conformance reports, configuration change requests, assessments, and status available for system-wide viewing.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40730	A	The MSS configuration management application service at the SMC shall maintain historical records of ECS configuration change requests, non-conformance reports, and system impact assessments.
			C-MSS-40750	A	The MSS configuration management application service at the SMC shall track approval and closure status of configuration change requests and non-conformance reports.
			C-MSS-40760	A	The MSS configuration management application service at the SMC shall report, and make available system-wide lists of the identity and disposition of configuration change requests and non-conformance reports against ECS baselines.
SMC-2530#A	Upon approval of a system enhancement, the SMC shall provide overall management of the implementation of the approved changes to the hardware and system software.	A: Performed by staff using various CM and other tools.	C-MSS-40530	A	The MSS configuration management application service shall identify implementation status for each version of every software library file, reflecting the lifecycle stage to which it has been promoted.
			C-MSS-40770	A	The MSS configuration management application service at the SMC shall collect, and make available system-wide, the allocations, schedules and status of tasks for implementing CCB-approved changes to ECS hardware and software and for correcting non-conformance with system requirements.
			C-MSS-40470	IR1	The MSS configuration management application service shall regulate operations on software library files through use of individual and group permissions.
			C-MSS-40480	IR1	The MSS configuration management application service shall use a checkout/edit/checkin paradigm to govern changing of software library files.
			C-MSS-40490	IR1	The MSS configuration management application service shall track each software library file that has been changed as a new version of the original file.
			C-MSS-40500	IR1	The MSS configuration management application service shall merge versions of software library files and identify version conflicts, if any.
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40550	IR1	The MSS configuration management application service shall reconstruct previous versions of software library files.
			C-MSS-40560	IR1	The MSS configuration management application service shall allow concurrent user access to software library files.
			C-MSS-40570	IR1	The MSS configuration management application service shall maintain an audit trail of all changes made to software library files.
			C-MSS-40520	A	The MSS configuration management application service shall request, verify, and log a change request number for a software library file before allowing the file to be checked out for modification.
SMC-2530#B	Upon approval of a system enhancement, the SMC shall provide overall management of the implementation of the approved changes to the hardware and system software.	B: Fully automated.	C-MSS-40530	A	The MSS configuration management application service shall identify implementation status for each version of every software library file, reflecting the lifecycle stage to which it has been promoted.
			C-MSS-40770	A	The MSS configuration management application service at the SMC shall collect, and make available system-wide, the allocations, schedules and status of tasks for implementing CCB-approved changes to ECS hardware and software and for correcting non-conformance with system requirements.
			C-MSS-40470	IR1	The MSS configuration management application service shall regulate operations on software library files through use of individual and group permissions.
			C-MSS-40480	IR1	The MSS configuration management application service shall use a checkout/edit/checkin paradigm to govern changing of software library files.
			C-MSS-40490	IR1	The MSS configuration management application service shall track each software library file that has been changed as a new version of the original file.
			C-MSS-40500	IR1	The MSS configuration management application service shall merge versions of software library files and identify version conflicts, if any.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40550	IR1	The MSS configuration management application service shall reconstruct previous versions of software library files.
			C-MSS-40560	IR1	The MSS configuration management application service shall allow concurrent user access to software library files.
			C-MSS-40570	IR1	The MSS configuration management application service shall maintain an audit trail of all changes made to software library files.
			C-MSS-40520	A	The MSS configuration management application service shall request, verify, and log a change request number for a software library file before allowing the file to be checked out for modification.
SMC-2535#A	Upon approval of an enhancement, the LSM shall facilitate the implementation of the approved changes within an elements hardware and software.	A: Partial compliance - Performed by M&O staff using vaious CM and other tools	C-MSS-40460	A	The MSS configuration management application service at the SMC shall assemble unlicensed toolkit software files for posting to the ECS bulletin board. Files consist of: a. source code; b. linkable object code for selected workstation configurations; c. makefiles that automate installation; d. installation instructions.
			C-MSS-40530	A	The MSS configuration management application service shall identify implementation status for each version of every software library file, reflecting the lifecycle stage to which it has been promoted.
			C-MSS-40770	A	The MSS configuration management application service at the SMC shall collect, and make available system-wide, the allocations, schedules and status of tasks for implementing CCB-approved changes to ECS hardware and software and for correcting non-conformance with system requirements.
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40420	IR1	The MSS configuration management application service at each site shall maintain M&O staff-definable software configuration status information for each version of every software library file.
			C-MSS-40470	IR1	The MSS configuration management application service shall regulate operations on software library files through use of individual and group permissions.
			C-MSS-40480	IR1	The MSS configuration management application service shall use a checkout/edit/checkin paradigm to govern changing of software library files.
			C-MSS-40490	IR1	The MSS configuration management application service shall track each software library file that has been changed as a new version of the original file.
			C-MSS-40500	IR1	The MSS configuration management application service shall merge versions of software library files and identify version conflicts, if any.
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40550	IR1	The MSS configuration management application service shall reconstruct previous versions of software library files.
			C-MSS-40560	IR1	The MSS configuration management application service shall allow concurrent user access to software library files.
			C-MSS-40570	IR1	The MSS configuration management application service shall maintain an audit trail of all changes made to software library files.
			C-MSS-40520	A	The MSS configuration management application service shall request, verify, and log a change request number for a software library file before allowing the file to be checked out for modification.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2535#B	Upon approval of an enhancement, the LSM shall facilitate the implementation of the approved changes within an elements hardware and software.	B: Full capability	C-MSS-40460	A	The MSS configuration management application service at the SMC shall assemble unlicensed toolkit software files for posting to the ECS bulletin board. Files consist of: a. source code; b. linkable object code for selected workstation configurations; c. makefiles that automate installation; d. installation instructions.
			C-MSS-40530	A	The MSS configuration management application service shall identify implementation status for each version of every software library file, reflecting the lifecycle stage to which it has been promoted.
			C-MSS-40770	A	The MSS configuration management application service at the SMC shall collect, and make available system-wide, the allocations, schedules and status of tasks for implementing CCB-approved changes to ECS hardware and software and for correcting non-conformance with system requirements.
			C-MSS-42000	B	The MSS Software Distribution Service shall maintain version controlled repositories for toolkit software, software upgrades, and documentation.
			C-MSS-42020	B	The MSS Software Distribution Service shall provide via the CSS Bulletin Board Service access to the toolkit repository/information.
			C-MSS-42030	B	The MSS Software Distribution Service shall package software, databases, and documentation for delivery to destinations at both ECS and ECS-connected sites.
			C-MSS-42040	B	The MSS Software Distribution Service shall schedule via the EMC Planning and Scheduling Service automatic and operator-assisted distribution of software packages.
			C-MSS-42070	B	The MSS Software Distribution Service shall determine destinations from stored lists as well as via interactive input.
			C-MSS-42080	B	The MSS Software Distribution Service shall have the capability to push software packages from a central distribution point/depot to remote target platforms (servers and workstations).
			C-MSS-42090	B	The MSS Software Distribution Service at the site shall have the capability to pull distribution packages from central distribution points/depots onto individual target destinations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-42100	B	The MSS Software Distribution Service shall initiate electronic transfer of distribution packages either automatically according to schedule or upon direct command.
			C-MSS-42110	B	The MSS Software Distribution Service shall maintain a record of successful package transfers as well as of each target that fails to receive a package intended for it.
			C-MSS-40410	IR1	The MSS configuration management application service at each DAAC shall maintain user-definable software configuration status information for each algorithm. (IR-1)
			C-MSS-40420	IR1	The MSS configuration management application service at each site shall maintain M&O staff-definable software configuration status information for each version of every software library file.
			C-MSS-40470	IR1	The MSS configuration management application service shall regulate operations on software library files through use of individual and group permissions.
			C-MSS-40480	IR1	The MSS configuration management application service shall use a checkout/edit/checkin paradigm to govern changing of software library files.
			C-MSS-40490	IR1	The MSS configuration management application service shall track each software library file that has been changed as a new version of the original file.
			C-MSS-40500	IR1	The MSS configuration management application service shall merge versions of software library files and identify version conflicts, if any.
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40550	IR1	The MSS configuration management application service shall reconstruct previous versions of software library files.
			C-MSS-40560	IR1	The MSS configuration management application service shall allow concurrent user access to software library files.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40570	IR1	The MSS configuration management application service shall maintain an audit trail of all changes made to software library files.
			C-MSS-40520	A	The MSS configuration management application service shall request, verify, and log a change request number for a software library file before allowing the file to be checked out for modification.
SMC-2540#A	Upon approval to include a fully tested enhancement to the algorithms, the SMC shall provide overall management of the implementation of the approved and modified software into the operational environment.	A: Performed by staff using various CM and other tools	C-MSS-40770	A	The MSS configuration management application service at the SMC shall collect, and make available system-wide, the allocations, schedules and status of tasks for implementing CCB-approved changes to ECS hardware and software and for correcting non-conformance with system requirements.
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
			C-MSS-40520	A	The MSS configuration management application service shall request, verify, and log a change request number for a software library file before allowing the file to be checked out for modification.
SMC-2540#B	Upon approval to include a fully tested enhancement to the algorithms, the SMC shall provide overall management of the implementation of the approved and modified software into the operational environment.	B: Fully automated (staff uses CM tools)	C-MSS-40770	A	The MSS configuration management application service at the SMC shall collect, and make available system-wide, the allocations, schedules and status of tasks for implementing CCB-approved changes to ECS hardware and software and for correcting non-conformance with system requirements.
			C-MSS-40510	IR1	The MSS configuration management application service shall maintain records of actual changes made to ECS software library files in implementing system enhancement requests.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-40540	IR1	The MSS configuration management application service shall perform builds of baseline systems for ECS platforms and audit the builds such that they can be repeated.
			C-MSS-40995	IR1	The MSS configuration management application service shall generate chronological reports of logged CM events associated with M&O staff-selectable: a. time frames; b. operation types; c. userids; d. hosts.
			C-MSS-40520	A	The MSS configuration management application service shall request, verify, and log a change request number for a software library file before allowing the file to be checked out for modification.
SMC-2600#A	The SMC shall support, control, and maintain ECS policies and procedures covering the following areas, at a minimum: a. Site or element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	A: Manually, except to the extent the staff opts to automate by using basic office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　simulates and displays an accountant's worksheet b.　enables revisions and calculations on the displayed worksheet's data c.　enables transfer of the worksheet data to database, word processing and graphics applications d.　enables printing of worksheet information.
			C-MSS-91012	A	The MSS Office Automation word processing capability shall be capable of importing from ASCII text and RTF formats.
			C-MSS-91015	A	The MSS Office Automation word processing capability shall be capable of exporting to Postscript, ASCII text, and RTF formats.
			C-MSS-91025	A	The MSS Office Automation spreadsheet capability shall be capable of importing from and exporting to ASCII text and Excel formats.
			C-MSS-91035	A	The MSS Office Automation graphics capability shall be capable of importing from and exporting to Postscript and GIF formats.
SMC-2600#B	The SMC shall support, control, and maintain ECS policies and procedures covering the following areas, at a minimum: a. Site or element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	B: Full capability	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-91012	A	The MSS Office Automation word processing capability shall be capable of importing from ASCII text and RTF formats.
			C-MSS-91015	A	The MSS Office Automation word processing capability shall be capable of exporting to Postscript, ASCII text, and RTF formats.
			C-MSS-91025	A	The MSS Office Automation spreadsheet capability shall be capable of importing from and exporting to ASCII text and Excel formats.
			C-MSS-91035	A	The MSS Office Automation graphics capability shall be capable of importing from and exporting to Postscript and GIF formats.
			C-MSS-52010	B	The MSS Policy and Procedures Management Service at the SMC shall provide the capability to prepare, store, maintain, and make available for distribution ECS policies and procedures.
			C-MSS-52020	B	The MSS Policy and Procedures Management Service shall provide the capability to access, select, and display/print ECS policies and procedures.
			C-MSS-52030	B	The MSS Policy and Procedures Management Service shall provide the capability to input, store, maintain, and view/print site specific policies and procedures.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-2605#A	The LSM shall support the site and element in implementing ESDIS Project policies and procedures received from the SMC covering the following areas, at a minimum: a. Element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	A: Partial compliance - performed by M&O staff using various office automation, CM, and other tools	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-91012	A	The MSS Office Automation word processing capability shall be capable of importing from ASCII text and RTF formats.
			C-MSS-91015	A	The MSS Office Automation word processing capability shall be capable of exporting to Postscript, ASCII text, and RTF formats.
			C-MSS-91025	A	The MSS Office Automation spreadsheet capability shall be capable of importing from and exporting to ASCII text and Excel formats.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91035	A	The MSS Office Automation graphics capability shall be capable of importing from and exporting to Postscript and GIF formats.
SMC-2605#B	The LSM shall support the site and element in implementing ESDIS Project policies and procedures received from the SMC covering the following areas, at a minimum: a. Element responsibility and authority b. Resource management c. Fault recovery d. Testing e. Simulation f. Maintenance g. Logistics h. Performance evaluation i. Training j. Quality and product assurance k. Inventory management l. System enhancements m. Finance management n. Administrative actions o. Security	B: Fully implemented	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a.　the development, modification, recording, and printing of graphic images b.　the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　simulates and displays an accountant's worksheet b.　enables revisions and calculations on the displayed worksheet's data c.　enables transfer of the worksheet data to database, word processing and graphics applications d.　enables printing of worksheet information.
			C-MSS-91012	A	The MSS Office Automation word processing capability shall be capable of importing from ASCII text and RTF formats.
			C-MSS-91015	A	The MSS Office Automation word processing capability shall be capable of exporting to Postscript, ASCII text, and RTF formats.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91025	A	The MSS Office Automation spreadsheet capability shall be capable of importing from and exporting to ASCII text and Excel formats.
			C-MSS-91035	A	The MSS Office Automation graphics capability shall be capable of importing from and exporting to Postscript and GIF formats.
			C-MSS-52020	B	The MSS Policy and Procedures Management Service shall provide the capability to access, select, and display/print ECS policies and procedures.
			C-MSS-52030	B	The MSS Policy and Procedures Management Service shall provide the capability to input, store, maintain, and view/print site specific policies and procedures.
SMC-2610#A	The SMC shall provide and maintain a bulletin board service with information on ECS status, events, and news.	A: Partial to support distribution of toolkits	C-CSS-62080	A	The CSS Bulletin Board Service shall collect and maintain access history and statistical information for the service.
			C-CSS-62130	A	The CSS Bulletin Board Service shall provide a "What's new" feature which informs the user of the new information available on the bulletin boards.
			C-CSS-62390	A	The CSS Bulletin Board Service shall allow attaching ASCII or binary files to a message.
			C-CSS-62800	A	The CSS Bulletin Board Service shall interface for the applications to post a message to bulletin boards.
			C-CSS-62810	A	The CSS Bulletin Board Service shall allow attaching ASCII and binary files to a message.
			C-CSS-62010	IR1	The CSS Bulletin Board Service shall support multiple (configurable) bulletin boards (newsgroups).
			C-CSS-62120	IR1	The CSS Bulletin Board Service shall provide the capability to respond to a posted message on a bulletin board by sending the response message to: a. the bulletin board (follow up) b. author of the original message (respond to author) c. named destinations (forward).
			C-CSS-62330	IR1	The CSS Bulletin Board Service shall provide the capability to respond to a message by sending the response to the bulletin board and/or to the author of the message and/or any other operator specified destination.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-62340	IR1	The CSS Bulletin Board Service shall provide capability: a. to search for a string in message headers or in message text. b. to search by author c. to search by subject.
			C-CSS-62350	IR1	The CSS Bulletin Board Service shall provide a catch-up feature which excludes user specified messages from appearing in the bulletin board when it is viewed next time.
			C-CSS-62360	IR1	The CSS Bulletin Board Service shall allow the users to post messages to bulletin board(s).
			C-CSS-62380	IR1	The CSS Bulletin Board Service shall allow users to copy/save a message to their local system.
SMC-2610#B	The SMC shall provide and maintain a bulletin board service with information on ECS status, events, and news.	B: Full capability	C-CSS-62080	A	The CSS Bulletin Board Service shall collect and maintain access history and statistical information for the service.
			C-CSS-62130	A	The CSS Bulletin Board Service shall provide a "What's new" feature which informs the user of the new information available on the bulletin boards.
			C-CSS-62390	A	The CSS Bulletin Board Service shall allow attaching ASCII or binary files to a message.
			C-CSS-62800	A	The CSS Bulletin Board Service shall interface for the applications to post a message to bulletin boards.
			C-CSS-62810	A	The CSS Bulletin Board Service shall allow attaching ASCII and binary files to a message.
			C-CSS-10530	B	The CSS DCCI shall accept bulletin board service request from the User.
			C-CSS-10570	B	The CSS DCCI shall provide bulletin board to the User.
			C-CSS-62010	IR1	The CSS Bulletin Board Service shall support multiple (configurable) bulletin boards (newsgroups).
			C-CSS-62120	IR1	The CSS Bulletin Board Service shall provide the capability to respond to a posted message on a bulletin board by sending the response message to: a. the bulletin board (follow up) b. author of the original message (respond to author) c. named destinations (forward).

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-62330	IR1	The CSS Bulletin Board Service shall provide the capability to respond to a message by sending the response to the bulletin board and/or to the author of the message and/or any other operator specified destination.
			C-CSS-62340	IR1	The CSS Bulletin Board Service shall provide capability: a. to search for a string in message headers or in message text. b. to search by author c. to search by subject.
			C-CSS-62350	IR1	The CSS Bulletin Board Service shall provide a catch-up feature which excludes user specified messages from appearing in the bulletin board when it is viewed next time.
			C-CSS-62360	IR1	The CSS Bulletin Board Service shall allow the users to post messages to bulletin board(s).
			C-CSS-62380	IR1	The CSS Bulletin Board Service shall allow users to copy/save a message to their local system.
SMC-2620#A	The SMC shall maintain via the ECS bulletin board service, the SMC toolkit consisting of a list of SDPS approved CASE tools and references to standards for exchanging data for scientist use.	A: Full capability	C-HRD-23010	A	The Bulletin Board Server shall host the CSS software configuration items to create a single, secure unified access to all ECS services.
			C-HRD-23015	A	The Bulletin Board Server shall host ECS client software and toolkits for ECS-external distribution.
SMC-2620#B	The SMC shall maintain via the ECS bulletin board service, the SMC toolkit consisting of a list of SDPS approved CASE tools and references to standards for exchanging data for scientist use.		C-CSS-03220	B	The CSS-DCHW CI Bulletin Board Server shall host the CSS software configuration items to create a single, secure unified access to all ECS services.
			C-CSS-03230	B	The CSS-DCHW CI Bulletin Board Server shall host ECS client software and toolkits for ECS-external distribution.
			C-MSS-42020	B	The MSS Software Distribution Service shall provide via the CSS Bulletin Board Service access to the toolkit repository/information.
			C-MSS-52040	B	The MSS Policy and Procedures Management Service shall provide a bulletin board service with information on ECS, status, events and news,

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-52050	B	The MSS Policy and Procedures Management Service shall maintain a bulletin board service with information on ECS, status, events and news,
SMC-3300#A	The SMC shall monitor site and element hardware status to determine their operational states including, at a minimum: a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode	A: Site and element hardware only, status required for this release.	C-MSS-66070	A	The MSS Performance Management Application Service shall be capable of receiving unrequested performance data from ECS managed objects.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-12005	IR1	The MSS Management User Interface (MUI) Service shall be compatible with the ECS management framework.
			C-MSS-66020	IR1	The MSS Performance Management Application Service shall be capable of monitoring ethernet-like device performance parameters as specified in IETF RFC 1623.
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.
			C-MSS-66120	IR1	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a.　　　on-line b.　　　off-line c.　　　in test mode

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.

			C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					    1. routers
					    2. links
					    3. bridges
					    4. gateways

			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
SMC-3300#B	The SMC shall monitor site and element hardware, and scientific and system software status to determine their operational states including, at a minimum: a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode	B: Full capability	C-MSS-66070	A	The MSS Performance Management Application Service shall be capable of receiving unrequested performance data from ECS managed objects.
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-12005	IR1	The MSS Management User Interface (MUI) Service shall be compatible with the ECS management framework.
			C-MSS-66020	IR1	The MSS Performance Management Application Service shall be capable of monitoring ethernet-like device performance parameters as specified in IETF RFC 1623.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.
			C-MSS-36305	B	The Management Agent Service shall have the capability to receive current mode from the IOS.
			C-MSS-36330	B	The Management Agent Service shall have the capability to send life cycle commands to the IOS.
			C-MSS-36335	B	The Management Agent Service shall have the capability to send mode requests to the IOS.
			C-MSS-36355	B	The Management Agent Service shall have the capability to receive current mode from the DMS.
			C-MSS-36375	B	The Management Agent Service shall have the capability to send life cycle commands to the DMS.
			C-MSS-36380	B	The Management Agent Service shall have the capability to send mode requests to the DMS.
			C-MSS-36405	B	The Management Agent Service shall have the capability to receive current mode from the PLS.
			C-MSS-36435	B	The Management Agent Service shall have the capability to send life cycle commands to the PLS.
			C-MSS-36440	B	The Management Agent Service shall have the capability to send mode requests to the PLS.
			C-MSS-36455	B	The Management Agent Service shall have the capability to receive current mode from the DPS.
			C-MSS-36480	B	The Management Agent Service shall have the capability to send life cycle commands to the DPS.
			C-MSS-36485	B	The Management Agent Service shall have the capability to send mode requests to the DPS.
			C-MSS-36505	B	The Management Agent Service shall have the capability to receive current mode from the INS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36540	B	The Management Agent Service shall have the capability to send life cycle commands to the INS.
			C-MSS-36545	B	The Management Agent Service shall have the capability to send mode requests to the INS.
			C-MSS-36555	B	The Management Agent Service shall have the capability to receive current mode from the DSS.
			C-MSS-36600	B	The Management Agent Service shall have the capability to send life cycle commands to the DSS.
			C-MSS-36605	B	The Management Agent Service shall have the capability to send mode requests to the DSS.
			C-MSS-36705	B	The Management Agent Service shall have the capability to receive current mode from the CSS.
			C-MSS-36750	B	The Management Agent Service shall have the capability to send life cycle commands to the CSS.
			C-MSS-36755	B	The Management Agent Service shall have the capability to send mode requests to the CSS.
			C-MSS-56040	B	The MSS Mode Management Service shall have the capability to monitor each independently executing mode for performance statistics.
			C-MSS-56050	B	The MSS Mode Management Service shall provide fault detection and isolation capabilities for each independently executing mode.
			C-MSS-56090	B	The MSS Mode Management Service shall have the capability to identify components which have been taken off-line for maintenance
			C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components a. network components 　1. routers 　2. links 　3. bridges 　4. gateways b. hosts c. operating systems d. peripherals e. data f. ECS applications.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66121	B	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode d. In maintenance, e. in simulation mode.
			S-DMS-01075	B	The LIMGR CI shall accept and process lifecycle commands from the MSS.
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
SMC-3300#Ir1	The SMC shall monitor site and element hardware, and scientific and system software status to determine their operational states including, at a minimum: a. On-line b. Failed	IR1: SNMP and COTS packages. To the extent of networks and host O/S.	C-MSS-12070	IR1	The MSS MUI Service shall have the capability to provide options and methods to the M&O Staff for screen configuration changes (color, symbol placement, etc) and for retaining the changes from session to session
			C-MSS-12030	IR1	The MSS MUI Service shall provide a capability for the M&O Staff to add/delete a symbol and to modify a symbol's shape, color and position
			C-MSS-12040	IR1	The MSS MUI Service shall provide a capability for an application to add/delete a symbol and to modify a symbol's shape, color and position
			C-MSS-12050	IR1	The MSS MUI Service shall provide a capability for the M&O Staff to add, delete, and modify text strings
			C-MSS-12060	IR1	The MSS MUI Service shall provide a capability for an application to add, delete, and modify text strings
			C-MSS-12100	IR1	The MSS MUI Service shall provide a capability for the M&O Staff to load and unload vendor or ECS defined MIB.
			C-MSS-12180	IR1	The MSS MUI Service shall provide the capability for an application to display on-line help windows
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.
			C-MSS-66120	IR1	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.
			C-MSS-12110	IR1	The MSS MUI Service shall provide a capability for applications to load and unload vendor or ECS defined MIB.
			C-MSS-12020	IR1	The MSS MUI Service shall have the capability to respond to keyboard and mouse input devices
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
SMC-3305#A	The LSM shall monitor its elements hardware, and scientific and system software status to determine their operational states including, at a minimum: a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode		C-MSS-66070	A	The MSS Performance Management Application Service shall be capable of receiving unrequested performance data from ECS managed objects.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-66020	IR1	The MSS Performance Management Application Service shall be capable of monitoring ethernet-like device performance parameters as specified in IETF RFC 1623.
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-20010	IR1	The MSS Discovery Service shall discover (via network protocol) new instances of managed objects.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66100	IR1	The MSS performance management application service shall be capable of retrieving the following data for all hosts: a. total CPU utilization b. memory utilization c. physical disk i/o's d. disk storage size e. disk storage used f. number of active processes g. length of run queue h. network i/o's (packets) i. network errors
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-66120	IR1	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.

			C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					    1. routers
					    2. links
					    3. bridges
					    4. gateways

			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-3305#B	The LSM shall monitor its elements hardware, and scientific and system software status to determine their operational states including, at a minimum : a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode		C-MSS-66070	A	The MSS Performance Management Application Service shall be capable of receiving unrequested performance data from ECS managed objects.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66020	IR1	The MSS Performance Management Application Service shall be capable of monitoring ethernet-like device performance parameters as specified in IETF RFC 1623.
			C-MSS-14010	IR1	The MSS Maps/Collection Service shall retain the status of managed objects and their relationship to symbols that comprise a graphical representation of the physical network topology.
			C-MSS-20010	IR1	The MSS Discovery Service shall discover (via network protocol) new instances of managed objects.
			C-MSS-16040	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to receive ECS management traps/events.
			C-MSS-20030	IR1	The MSS Discovery Service shall report missing occurrences of managed objects.
			C-MSS-66100	IR1	The MSS performance management application service shall be capable of retrieving the following data for all hosts: a. total CPU utilization b. memory utilization c. physical disk i/o's d. disk storage size e. disk storage used f. number of active processes g. length of run queue h. network i/o's (packets) i. network errors
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-66130	IR1	The MSS performance management application service shall be capable of receiving operational state change notifications from network components, hosts, applications, and peripherals.
			C-MSS-36305	B	The Management Agent Service shall have the capability to receive current mode from the IOS.
			C-MSS-36355	B	The Management Agent Service shall have the capability to receive current mode from the DMS.
			C-MSS-36405	B	The Management Agent Service shall have the capability to receive current mode from the PLS.
			C-MSS-36455	B	The Management Agent Service shall have the capability to receive current mode from the DPS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36505	B	The Management Agent Service shall have the capability to receive current mode from the INS.
			C-MSS-36555	B	The Management Agent Service shall have the capability to receive current mode from the DSS.
			C-MSS-36705	B	The Management Agent Service shall have the capability to receive current mode from the CSS.
			C-MSS-56040	B	The MSS Mode Management Service shall have the capability to monitor each independently executing mode for performance statistics.
			C-MSS-56050	B	The MSS Mode Management Service shall provide fault detection and isolation capabilities for each independently executing mode.

			C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					   1. routers
					   2. links
					   3. bridges
					   4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

			C-MSS-66121	B	The MSS performance management application service shall be capable of determining the operational state of all network components, hosts, and peripherals to be: a. on-line b. off-line c. in test mode d. In maintenance, e. in simulation mode.
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-3305#Ir1	The LSM shall monitor its elementĺs hardware, and scientific and system software status to determine their operational states including, at a minimum : a. On-line b. Failed	IR1: This requirement is supported as follows: IR-1 shall monitor the operational status of DAAC hardware and software at the EDF.	C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-36010	IR1	The MSS Management Agent Service shall retrieve data from ECS managed objects in test or operational mode.
			C-MSS-68000	IR1	The MSS performance management application service shall be capable of graphically displaying the operational state of managed objects through the MUI service.
SMC-3310#B	The SMC shall monitor each elements schedule and execution of events.	B: Full capability			
SMC-3315#A	The LSM shall monitor its elements schedule and execution of events.	A: Performed by M&O staff using manual or semi-automated performance management tools	C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components a. network components 1. routers 2. links 3. bridges 4. gateways

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

SMC-3315#B	The LSM shall monitor its elements schedule and execution of events.	B: Fully automated.	C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

			C-MSS-92540	B	The MSS Report Generation Service shall be capable of generating a Planning Management Report.

SMC-3320#A	The SMC shall monitor execution of ground operations events.	A: Manual	C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways

SMC-3320#B	The SMC shall monitor execution of ground operations events.	B: Full capability	C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

SMC-3325#A	The LSM shall monitor execution of ground operations events.	A: Performed by M&O staff using manual or semi-automated performance management tools	C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

SMC-3325#B	The LSM shall monitor execution of ground operations events.	B: Fully automated.	C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

SMC-3330#A	The SMC shall compare and evaluate system-wide, site, and element actual schedule performance against planned schedule performance.	A: Performed by M&O staff using available performance management tools	C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways

SMC-3330#B	The SMC shall compare and evaluate system-wide, site, and element actual schedule performance against planned schedule performance.	B: Full capability	C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

SMC-3335#A	The LSM shall compare and evaluate its elements actual schedule performance against planned schedule performance.	A: Performed by M&O staff using performance management and scheduling tools	C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

SMC-3335#B	The LSM shall compare and evaluate its elements actual schedule performance against planned schedule performance.	B: Full capability (through use of various performance management and scheduling tools)	C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					  1. routers
					  2. links
					  3. bridges
					  4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

SMC-3340#A	The SMC shall perform quality assurance for the overall ECS performance as well as programmatic areas that include, at a minimum: a. System quality testing, benchmarks, and audits for system enhancement implementations b. System quality checking and audits of products processed and delivered c. Quality testing and audits of site and element resource performance.	A: Performed by M&O staff using available performance management tools.	C-MSS-69000	A	The MSS performance management application service shall maintain operational benchmark test procedures.
			C-MSS-69020	A	The MSS performance management application service shall be capable of performing operational benchmark tests.
			C-MSS-69030	A	The MSS performance management application service shall be capable of providing results of benchmark tests and results of predefined tests to the M&O staff for validation.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-66170	IR1	The MSS performance management application service shall log ECS performance data pertaining to ECS network components and operating system resources.
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-68020	IR1	The MSS performance management application service shall be capable of printing M&O staff-selected performance statistics.
SMC-3340#B	The SMC shall perform quality assurance for the overall ECS performance as well as programmatic areas that include, at a minimum: a. System quality testing, benchmarks, and audits for system enhancement implementations b. System quality checking and audits of products processed and delivered c. Quality testing and audits of site and element resource performance.	B: Full capability	C-MSS-69000	A	The MSS performance management application service shall maintain operational benchmark test procedures.
			C-MSS-69020	A	The MSS performance management application service shall be capable of performing operational benchmark tests.
			C-MSS-69030	A	The MSS performance management application service shall be capable of providing results of benchmark tests and results of predefined tests to the M&O staff for validation.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-66171	B	The MSS performance management application service shall log ECS performance data pertaining to ECS network components, ECS applications and operating system resources.
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.
			C-MSS-68020	IR1	The MSS performance management application service shall be capable of printing M&O staff-selected performance statistics.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-3345#A	The LSM shall perform quality assurance for its site/elements performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance,	A: Performed by M&O staff using various performance management tools	C-MSS-69010	A	The MSS performance management application service shall receive and maintain operational benchmark test results.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-66170	IR1	The MSS performance management application service shall log ECS performance data pertaining to ECS network components and operating system resources.
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.
			C-MSS-68020	IR1	The MSS performance management application service shall be capable of printing M&O staff-selected performance statistics.
SMC-3345#B	The LSM shall perform quality assurance for its site/elements performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance,	B: Full capability (through use of various performance management tools)	C-MSS-69010	A	The MSS performance management application service shall receive and maintain operational benchmark test results.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-66171	B	The MSS performance management application service shall log ECS performance data pertaining to ECS network components, ECS applications and operating system resources.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-68010	IR1	The MSS performance management application service shall be capable of displaying M&O staff-selected performance statistics through the MUI in tabular and graphical formats.
			C-MSS-68020	IR1	The MSS performance management application service shall be capable of printing M&O staff-selected performance statistics.
SMC-3350#A	The SMC shall generate, maintain, and update performance criteria and responses to performance deficiencies for system, site, and element resources and activities, such as: a. Data collection b. Product generation, QA and validation c. Reprocessing d. Data delivery to DAACs and to users e. Response to user requests f. Response to TOOs g. Response to field experiments h. Response to emergency situations	A: Performed by M&O staff using available performance management tools	C-MSS-66300	A	The MSS EMC performance management application service shall log received summarized site status.
SMC-3350#B	The SMC shall generate, maintain, and update performance criteria and responses to performance deficiencies for system, site, and element resources and activities, such as: a. Data collection b. Product generation, QA and validation c. Reprocessing d. Data delivery to DAACs and to users e. Response to user requests f. Response to TOOs g. Response to field experiments h. Response to emergency situations	B: Full capability	C-MSS-66300	A	The MSS EMC performance management application service shall log received summarized site status.
			C-MSS-36300	B	The Management Agent Service shall have the capability to receive processing status from the IOS.
			C-MSS-36325	B	The Management Agent Service shall have the capability to receive resource utilization data from the IOS.
			C-MSS-36350	B	The Management Agent Service shall have the capability to receive processing status from the DMS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36370	B	The Management Agent Service shall have the capability to receive resource utilization data from the DMS.
			C-MSS-36400	B	The Management Agent Service shall have the capability to receive processing status from the PLS.
			C-MSS-36420	B	The Management Agent Service shall have the capability to receive resource utilization data from the PLS.
			C-MSS-36450	B	The Management Agent Service shall have the capability to receive processing status from the DPS.
			C-MSS-36470	B	The Management Agent Service shall have the capability to receive resource utilization data from the DPS.
			C-MSS-36500	B	The Management Agent Service shall have the capability to receive processing status from the INS.
			C-MSS-36550	B	The Management Agent Service shall have the capability to receive processing status from the DSS.
			C-MSS-36570	B	The Management Agent Service shall have the capability to receive resource utilization data from the DSS.
			C-MSS-36700	B	The Management Agent Service shall have the capability to receive processing status from the CSS.
			C-MSS-36720	B	The Management Agent Service shall have the capability to receive resource utilization data from the CSS.
			C-MSS-75155	B	The Accountability Service shall have the capability to receive data delivery records from the INS.
			C-MSS-75160	B	The Accountability Service shall have the capability to receive data delivery notices from the INS.
SMC-3355#A	The LSM shall implement the performance criteria from SMC (including parametric limits and operational threshold levels) for evaluating element resource performance.	A: Performed by M&O staff using performance management tools	C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.
			C-MSS-66240	IR1	The MSS performance management application service shall be capable of evaluating each performance metric against defined thresholds.

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-66210	A	The MSS EMC performance management application service shall be capable of sending a list of suggested initial thresholds for each performance metric to the MSS site performance management application service.
			C-MSS-66220	A	The MSS site performance management application service shall be capable of receiving a list of suggested initial thresholds for each performance metric from the MSS EMC performance management application service.
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-3355#B	The LSM shall implement the performance criteria from SMC (including parametric limits and operational threshold levels) for evaluating element resource performance.	B: Full capability (through use of performance management tools)	C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.
			C-MSS-66240	IR1	The MSS performance management application service shall be capable of evaluating each performance metric against defined thresholds.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66210	A	The MSS EMC performance management application service shall be capable of sending a list of suggested initial thresholds for each performance metric to the MSS site performance management application service.
			C-MSS-66220	A	The MSS site performance management application service shall be capable of receiving a list of suggested initial thresholds for each performance metric from the MSS EMC performance management application service.
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-3370#A	For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation		C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.
			C-MSS-66190	IR1	The MSS performance management application service shall provide a configurable number of thresholds for each performance metric.
			C-MSS-66200	IR1	The MSS EMC performance management application service shall be capable of creating a list of suggested initial threshold values for each performance metric.
SMC-3370#B	For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation		C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.
			C-MSS-66190	IR1	The MSS performance management application service shall provide a configurable number of thresholds for each performance metric.
			C-MSS-66200	IR1	The MSS EMC performance management application service shall be capable of creating a list of suggested initial threshold values for each performance metric.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-3370#Ir1	For each performance parameter, the SMC shall have the capability of establishing multiple levels of thresholds to include, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation	This requirement is supported to the extent that it is supported by the network, host operating systems, and the configured Ir1 COTS packages used for system management at the EDF.	C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.
			C-MSS-66190	IR1	The MSS performance management application service shall provide a configurable number of thresholds for each performance metric.
			C-MSS-66200	IR1	The MSS EMC performance management application service shall be capable of creating a list of suggested initial threshold values for each performance metric.
SMC-3375#A	For each limit checked parameter, the LSM (including those thresholds directed by the SMC) shall have the capability of evaluating multiple levels of thresholds including, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation		C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.

			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events:
					    a. communications software version mismatch errors
					    b. communication software configuration errors
					    c. the following errors in communication hardware:
					        1. host not reachable
					        2. router not reachable
					        3. errors and failures of communication links
					    d. Errors in the communications protocols supported
					    e. degradation of performance due to established thresholds being exceeded
					    f. Peripherals
					    g. Databases
					    h. Applications:
					        1. process missing (Application or COTS product)
					        2. process in a loop
					        3. process failed

			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a. Community to respond to and set attributes b. Agent location & contact person c. Traps to send d. Events to log & log file name

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.
			C-MSS-66240	IR1	The MSS performance management application service shall be capable of evaluating each performance metric against defined thresholds.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
SMC-3375#B	For each limit checked parameter, the LSM (including those thresholds directed by the SMC) shall have the capability of evaluating multiple levels of thresholds including, at a minimum: a. On/off b. Pass/fail c. Various levels of degradation		C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-36050	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to receive ECS management set message from the Monitor/Control Service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: 　　　a.　　communications software version mismatch errors 　　　b.　　communication software configuration errors 　　　c.　　the following errors in communication hardware: 　　　　　1. host not reachable 　　　　　2. router not reachable 　　　　　3. errors and failures of communication links 　　　d.　　Errors in the communications protocols supported 　　　e.　　degradation of performance due to established thresholds being exceeded 　　　f.　　Peripherals 　　　g.　　Databases 　　　h.　　Applications: 　　　　　1. process missing (Application or COTS product) 　　　　　2. process in a loop 　　　　　3. process failed
			C-MSS-36040	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to send ECS management traps/events to the Monitor/Control Service.
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-36060	IR1	The MSS Management Agent Service shall provide an ECS management agent that is configurable to include: a.　　Community to respond to and set attributes b.　　Agent location & contact person c.　　Traps to send d.　　Events to log & log file name
			C-MSS-66230	IR1	The MSS performance management application service shall allow each performance metric threshold to be configurable.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66240	IR1	The MSS performance management application service shall be capable of evaluating each performance metric against defined thresholds.
			C-MSS-66250	IR1	The MSS performance management application service shall record an event in the local History Log whenever a threshold is crossed.
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
SMC-3375#Ir1	For each limit checked parameter, the LSM (including those thresholds directed by the SMC) shall have the capability of evaluating multiple levels of thresholds including, at a minimum: a. On/off b. Pass/fail	This requirement is supported to the extent that it is supported by the network, host operating systems, and the configured Ir1 COTS packages used for system management at the EDF. Ir1 does not provide an LSM.	C-MSS-16030	IR1	The MSS Monitor/Control Service shall be able to communicate via ECS management protocol with the MSS Management Agent Service to send ECS management set messages to configure and control the processing performed by the ECS management agent.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events:
					    a. communications software version mismatch errors
					    b. communication software configuration errors
					    c. the following errors in communication hardware:
					        1. host not reachable
					        2. router not reachable
					        3. errors and failures of communication links
					    d. Errors in the communications protocols supported
					    e. degradation of performance due to established thresholds being exceeded
					    f. Peripherals
					    g. Databases
					    h. Applications:
					        1. process missing (Application or COTS product)
					        2. process in a loop
					        3. process failed

			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
SMC-3380#A	The SMC shall evaluate overall system performance.		C-MSS-66280	A	The MSS site performance management application service shall be capable of extracting summarized site status information from logged performance data.
			C-MSS-66290	A	The MSS site performance management application service shall be capable of sending summarized status information for that site to the MSS EMC performance management application service.
			C-MSS-66050	IR1	The MSS performance management application service shall be capable of requesting performance data from each individual managed object: a. at configurable intervals b. on demand.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

			C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					    1. routers
					    2. links
					    3. bridges
					    4. gateways

			C-MSS-66040	IR1	The MSS performance management application service shall be capable of specifying which available performance metrics are to be gathered from each individual managed object.
SMC-3380#B	The SMC shall evaluate overall system performance.	B: Full capability	C-MSS-66280	A	The MSS site performance management application service shall be capable of extracting summarized site status information from logged performance data.
			C-MSS-66290	A	The MSS site performance management application service shall be capable of sending summarized status information for that site to the MSS EMC performance management application service.
			C-MSS-66050	IR1	The MSS performance management application service shall be capable of requesting performance data from each individual managed object: a. at configurable intervals b. on demand.
			C-MSS-66040	IR1	The MSS performance management application service shall be capable of specifying which available performance metrics are to be gathered from each individual managed object.

			C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					    1. routers
					    2. links
					    3. bridges
					    4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-3380#Ir1	The SMC shall evaluate overall system performance.	Ops.	C-MSS-66050	IR1	The MSS performance management application service shall be capable of requesting performance data from each individual managed object: a. at configurable intervals b. on demand.
			C-MSS-66040	IR1	The MSS performance management application service shall be capable of specifying which available performance metrics are to be gathered from each individual managed object.
SMC-3385#A	The LSM shall evaluate system performance against the ESDIS project established performance criteria.		C-MSS-66050	IR1	The MSS performance management application service shall be capable of requesting performance data from each individual managed object: a. at configurable intervals b. on demand.
			C-MSS-66060	IR1	The MSS performance management application service shall be capable of receiving requested performance data from ECS components.
			C-MSS-66100	IR1	The MSS performance management application service shall be capable of retrieving the following data for all hosts: a. total CPU utilization b. memory utilization c. physical disk i/o's d. disk storage size e. disk storage used f. number of active processes g. length of run queue h. network i/o's (packets) i. network errors

			C-MSS-66000	IR1	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					    1. routers
					    2. links
					    3. bridges
					    4. gateways

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66305	A	The MSS Performance Management Application Service shall be capable of collecting the following performance data for all ECS-managed processes: a. start time b. stop time c. CPU utilization d. memory utilization e. disk reads f. disk writes
			C-MSS-66320	A	The MSS Performance Management Application Service shall be capable of receiving the following performance data from the Data Server: a. total order volume b. average elapsed time for Data Server events
			C-MSS-66330	A	The MSS Performance Management Application Service shall be capable of receiving the following performance data from Data Processing: a. number of products generated b. product run times c. product CPU times
			C-MSS-66340	A	The MSS Performance Management Application Service shall be capable of receiving the following performance data from Ingest: a. ingest volumes b. processing times c. no. of completed requests d. no. of unsuccessful requests
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-3385#B	The LSM shall evaluate system performance against the ESDIS project established performance criteria.		C-MSS-66050	IR1	The MSS performance management application service shall be capable of requesting performance data from each individual managed object: a. at configurable intervals b. on demand.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66060	IR1	The MSS performance management application service shall be capable of receiving requested performance data from ECS components.
			C-MSS-66100	IR1	The MSS performance management application service shall be capable of retrieving the following data for all hosts: a. total CPU utilization b. memory utilization c. physical disk i/o's d. disk storage size e. disk storage used f. number of active processes g. length of run queue h. network i/o's (packets) i. network errors
			C-MSS-66305	A	The MSS Performance Management Application Service shall be capable of collecting the following performance data for all ECS-managed processes: a. start time b. stop time c. CPU utilization d. memory utilization e. disk reads f. disk writes
			C-MSS-66320	A	The MSS Performance Management Application Service shall be capable of receiving the following performance data from the Data Server: a. total order volume b. average elapsed time for Data Server events
			C-MSS-66330	A	The MSS Performance Management Application Service shall be capable of receiving the following performance data from Data Processing: a. number of products generated b. product run times c. product CPU times
			C-MSS-66340	A	The MSS Performance Management Application Service shall be capable of receiving the following performance data from Ingest: a. ingest volumes b. processing times c. no. of completed requests d. no. of unsuccessful requests

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

			C-MSS-66001	B	The MSS performance management application service shall be capable of monitoring the performance of the following ECS components
					a. network components
					   1. routers
					   2. links
					   3. bridges
					   4. gateways
					b. hosts
					c. operating systems
					d. peripherals
					e. data
					f. ECS applications.

			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-3390#A	The SMC shall generate alert indicators of fault or degraded conditions with the corrective actions.		C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-12080	IR1	The MSS MUI Service shall provide a capability for applications to alert the M&O Staff
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60140	IR1	The MSS Site Fault Management Application Service shall have the capability to generate a fault notification when a predefined threshold on a performance metric is exceeded.
			C-MSS-60170	IR1	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. Other external systems as defined in Section 5.1.
			C-MSS-60500	IR1	The MSS EMC Fault Management Application Service shall coordinate the recovery from conditions of performance degradation and faults with the sites and external network service providers.
SMC-3390#B	The SMC shall generate alert indicators of fault or degraded conditions with the corrective actions.		C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-60171	B	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN
			C-MSS-12080	IR1	The MSS MUI Service shall provide a capability for applications to alert the M&O Staff

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60140	IR1	The MSS Site Fault Management Application Service shall have the capability to generate a fault notification when a predefined threshold on a performance metric is exceeded.
			C-MSS-60500	IR1	The MSS EMC Fault Management Application Service shall coordinate the recovery from conditions of performance degradation and faults with the sites and external network service providers.
SMC-3390#Ir1	The SMC shall generate alert indicators of fault or degraded conditions.	This requirement is supported to the extent that it is supported by the network, host operating systems, and the configured Ir1 COTS packages used for system management at the EDF.	C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60140	IR1	The MSS Site Fault Management Application Service shall have the capability to generate a fault notification when a predefined threshold on a performance metric is exceeded.
			C-MSS-60170	IR1	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. Other external systems as defined in Section 5.1.
			C-MSS-60500	IR1	The MSS EMC Fault Management Application Service shall coordinate the recovery from conditions of performance degradation and faults with the sites and external network service providers.
			C-MSS-90150	IR1	The DBMS shall support access structures (i.e., single-level indexes, multilevel indexes) to improve the efficiency of retrieval of management data.
SMC-3395#A	The LSM shall generate, in response to each limit check threshold, alert indicators of fault or degraded conditions.		C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-12080	IR1	The MSS MUI Service shall provide a capability for applications to alert the M&O Staff

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60140	IR1	The MSS Site Fault Management Application Service shall have the capability to generate a fault notification when a predefined threshold on a performance metric is exceeded.
SMC-3395#B	The LSM shall generate, in response to each limit check threshold, alert indicators of fault or degraded conditions.		C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
			C-MSS-16060	IR1	The MSS Monitor/Control Service shall allow the capability to set thresholds on managed resources that are monitored
			C-MSS-36020	IR1	The MSS Management Agent Service shall communicate via ECS management protocol with the MSS Monitor/Control Service to respond to requests for managed object MIB attributes
			C-MSS-16050	IR1	The MSS Monitor/Control Service shall allow customized M&O staff-event notifications and automatic actions.
			C-MSS-16070	IR1	The MSS Monitor/Control Service shall automatically report when a threshold has been exceeded by generating a ECS management event
			C-MSS-12080	IR1	The MSS MUI Service shall provide a capability for applications to alert the M&O Staff
			C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60140	IR1	The MSS Site Fault Management Application Service shall have the capability to generate a fault notification when a predefined threshold on a performance metric is exceeded.
SMC-3395#Ir1	The LSM shall generate, in response to each limit check threshold, alert indicators of fault or degraded conditions with the appropriate corrective actions.	This requirement is supported to the extent that it is supported by the network, host operating systems, and the configured Ir1 COTS packages used for system management at the EDF. The capability to generate corrective actions is not supported. Ir1 does not provide an LSM.	C-MSS-60080	IR1	The MSS Fault Management Application Service shall have the capability to establish, view, modify and delete thresholds on performance metrics it measures.
			C-MSS-60100	IR1	The MSS Fault Management Application Service shall have the capability to poll for the detection of fault/performance information.
			C-MSS-60110	IR1	The MSS Fault Management Application Service shall be capable of receiving fault notifications.
			C-MSS-60120	IR1	The MSS Fault Management Application Service shall have the capability to define the frequency with which polling is done for the detection of fault/performance information.
			C-MSS-60140	IR1	The MSS Site Fault Management Application Service shall have the capability to generate a fault notification when a predefined threshold on a performance metric is exceeded.

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-3397#A	The LSM shall generate, as needed, requests for performance testing, including, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	This requirement will require L4s to be traced to it. L4s should indicate req uirement to provide tools to facilitate meeting this requirement, while M&O will write procedures to accomplish this capability.			
SMC-3397#B	The LSM shall generate, as needed, requests for performance testing, including, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	This requirement will require L4s to be traced to it. L4s should indicate req uirement to provide tools to facilitate meeting this requirement, while M&O will write procedures to accomplish this capability.	C-MSS-66123	B	The MSS Performance Management Application Service shall generate requests for performance testing that identify the required resources, purpose, requested priority, required environment, operations impacts and expected results.
SMC-3400#A	The SMC shall generate, as needed, requests for performance testing that includes, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	This requirement will require L4s to be traced to it. L4s should indicate req uirement to provide tools to facilitate meeting this requirement, while M&O will write procedures to accomplish this capability.			
SMC-3400#B	The SMC shall generate, as needed, requests for performance testing that includes, at a minimum: a. Resource to be tested b. Test purpose c. Requested test priority d. Required test environment e. Impacts to operations f. Expected test results	This requirement will require L4s to be traced to it. L4s should indicate req uirement to provide tools to facilitate meeting this requirement, while M&O will write procedures to accomplish this capability.	C-MSS-60303	B	The Fault Management Application Service shall have the capability to send diagnostic test requests to the ISS.
			C-MSS-60305	B	The Fault Management Application Service shall have the capability to receive diagnostic test results from the ISS.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66123	B	The MSS Performance Management Application Service shall generate requests for performance testing that identify the required resources, purpose, requested priority, required environment, operations impacts and expected results.
SMC-3410#A	The SMC shall perform short and long-term trend analysis of system, site, and element performance to include, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	A: Performed by M&O staff using various performance management tools	C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.
			C-MSS-66300	A	The MSS EMC performance management application service shall log received summarized site status.
			C-MSS-67000	A	The MSS performance management application service shall be capable of extracting values of performance metrics gathered for a specified managed objects over a configurable period of time from the Management Database.
			C-MSS-67010	A	The MSS performance management application service shall be capable of generating a graph of the extracted performance metric values.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
SMC-3410#B	The SMC shall perform short and long-term trend analysis of system, site, and element performance to include, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	B: Full capability	C-MSS-18260	A	The MSS Management Data Access Service shall have the capability to schedule the transfer and loading log files into the management database at the site.
			C-MSS-18280	A	The MSS Management Data Access Service shall have the capability to schedule the transfer of management data at the sites to the SMC.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66300	A	The MSS EMC performance management application service shall log received summarized site status.
			C-MSS-67000	A	The MSS performance management application service shall be capable of extracting values of performance metrics gathered for a specified managed objects over a configurable period of time from the Management Database.
			C-MSS-67010	A	The MSS performance management application service shall be capable of generating a graph of the extracted performance metric values.
			C-MSS-16020	IR1	The MSS Monitor/Control Service shall communicate via ECS management protocol with the MSS Management Agent Service to request management data on a managed object.
SMC-3415#A	The LSM shall perform short and long-term trend analysis of element performance, including, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	A: Performed by M&O staff using performance management tools	C-MSS-66300	A	The MSS EMC performance management application service shall log received summarized site status.
			C-MSS-67000	A	The MSS performance management application service shall be capable of extracting values of performance metrics gathered for a specified managed objects over a configurable period of time from the Management Database.
			C-MSS-67010	A	The MSS performance management application service shall be capable of generating a graph of the extracted performance metric values.
			C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
SMC-3415#B	The LSM shall perform short and long-term trend analysis of element performance, including, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	B: Full capability	C-MSS-66300	A	The MSS EMC performance management application service shall log received summarized site status.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-67000	A	The MSS performance management application service shall be capable of extracting values of performance metrics gathered for a specified managed objects over a configurable period of time from the Management Database.
			C-MSS-67010	A	The MSS performance management application service shall be capable of generating a graph of the extracted performance metric values.
			C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
SMC-3415#Ir1	The LSM shall perform short and long-term trend analysis of element performance, including, at a minimum: a. Operational status b. Performance of a particular resource c. Maintenance activities (e.g., number of repairs per item)	This requirement is supported as follows: IR1 shall monitor the operational status of DAAC hardware and software at the EDF and will provide performance monitoring and Office Automation tools at the local sites. IR-1 does not provide an LSM.	C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
SMC-3420#A	The SMC shall perform short and long term trend analysis of system, site, and element performance to determine the impact on resources of, at a minimum: a. Modifying system, site, or element activity allocations b. Potential enhancements to system, site, or element	A: Performed by M&O staff using various performance management tools	C-MSS-67000	A	The MSS performance management application service shall be capable of extracting values of performance metrics gathered for a specified managed objects over a configurable period of time from the Management Database.
			C-MSS-67010	A	The MSS performance management application service shall be capable of generating a graph of the extracted performance metric values.
SMC-3420#B	The SMC shall perform short and long term trend analysis of system, site, and element performance to determine the impact on resources of, at a minimum: a. Modifying system, site, or element activity allocations b. Potential enhancements to system, site, or element	B: Full capability	C-MSS-67000	A	The MSS performance management application service shall be capable of extracting values of performance metrics gathered for a specified managed objects over a configurable period of time from the Management Database.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-67010	A	The MSS performance management application service shall be capable of generating a graph of the extracted performance metric values.
SMC-3421#A	The SMC shall analyze user feedback information supporting the development of recommended remedial or enhancement actions.	Facilitation of this requirement will be described by M&O in their 611/OP3 document.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-3421#B	The SMC shall analyze user feedback information supporting the development of recommended remedial or enhancement actions.	Facilitation of this requirement will be described by M&O in their 611/OP3 document.	C-MSS-75150	B	The Accountability Service shall have the capability to send user comment surveys to the CLS.
SMC-4300#A	The SMC shall support, maintain, and update system fault management policies and procedures including, at a minimum: a. Fault identification b. Fault priorities c. Recovery or corrective actions	A: Performed by M&O staff using office automation tools	C-MSS-60410	A	The MSS Site Fault Management Application Service shall have the capability to receive Fault Management Policies and Procedures from the EMC.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-4300#B	The SMC shall support, maintain, and update system fault management policies and procedures including, at a minimum: a. Fault identification b. Fault priorities c. Recovery or corrective actions	B: Full capability	C-MSS-60410	A	The MSS Site Fault Management Application Service shall have the capability to receive Fault Management Policies and Procedures from the EMC.
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-60400	A	The MSS Fault Management Application Service shall support, maintain, and update system fault management policies and procedures, to include: a. Fault Identification b. Fault priorities c. Recovery or corrective actions
SMC-4305#A	The LSM shall maintain fault management policies and procedures for its element.	A: Full compliance - Performed by M&O staff using office automation tools	C-MSS-60410	A	The MSS Site Fault Management Application Service shall have the capability to receive Fault Management Policies and Procedures from the EMC.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-4305#B	The LSM shall maintain fault management policies and procedures for its element.		C-MSS-60410	A	The MSS Site Fault Management Application Service shall have the capability to receive Fault Management Policies and Procedures from the EMC.
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-60400	A	The MSS Fault Management Application Service shall support, maintain, and update system fault management policies and procedures, to include: a. Fault Identification b. Fault priorities c. Recovery or corrective actions
SMC-4305#Ir1	The LSM shall maintain fault management policies and procedures for its element.	This requirement is supported as follows: Ir1 shall support the M&O staff in the maintenance of fault management policies and procedures with Office Automation tools at the local sites.	C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-4310#A	The SMC shall perform fault analysis including, at a minimum: a. Isolation b. Location c. Identification d. Characterization		C-MSS-60170	IR1	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. Other external systems as defined in Section 5.1.
			C-MSS-60370	IR1	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. the site Fault Management Applications b. other external systems as defined in Section 5.1 of the current version of 304-CD-003.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-4310#B	The SMC shall perform fault analysis including, at a minimum: a. Isolation b. Location c. Identification d. Characterization	B: Semi-automated or automated	C-MSS-60171	B	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. EBnet c. ASTER d. NOAA(SAA) e. Landsat(MMO) f. NSI g. NOLAN
			C-MSS-60371	B	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. Site Fault Management Applications b. EBnet c. ASTER b. NOAA(SAA) e. Landsat (MMO) f. NSI g. NOLAN.
SMC-4310#Ir1	The SMC shall perform fault analysis including, at a minimum: a. Isolation b. Location c. Identification d. Characterization	IR1: to extent SMC-3300 is performed. To the extent of networks and host O/S.	C-MSS-60170	IR1	The MSS EMC Fault Management Application Service shall be capable of requesting fault notification and performance degradation data from : a. Site Fault Management Applications b. Other external systems as defined in Section 5.1.
			C-MSS-60370	IR1	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. the site Fault Management Applications b. other external systems as defined in Section 5.1 of the current version of 304-CD-003.
SMC-4311#A	The SMC shall have the capability to perform fault analysis to the level of, at a minimum: a. Subsystem b. Equipment	A: Partial compliance - not all sites, services, and componenets are in Rel. A	C-MSS-60370	IR1	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. the site Fault Management Applications b. other external systems as defined in Section 5.1 of the current version of 304-CD-003.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-4311#B	The SMC shall have the capability to perform fault analysis to the level of, at a minimum: a. Subsystem b. Equipment	B: Full capability	C-MSS-36215	B	The Management Agent Service shall have the capability to receive event notification from the CLS.
			C-MSS-36320	B	The Management Agent Service shall have the capability to receive event notification from the IOS.
			C-MSS-36365	B	The Management Agent Service shall have the capability to receive event notification from the DMS.
			C-MSS-36415	B	The Management Agent Service shall have the capability to receive event notification from the PLS.
			C-MSS-36515	B	The Management Agent Service shall have the capability to receive event notification from the INS.
			C-MSS-36565	B	The Management Agent Service shall have the capability to receive event notification from the DSS.
			C-MSS-36715	B	The Management Agent Service shall have the capability to receive event notification from the CSS.
			C-MSS-60371	B	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. Site Fault Management Applications b. EBnet c. ASTER b. NOAA(SAA) e. Landsat (MMO) f. NSI g. NOLAN.
SMC-4311#Ir1	he SMC shall have the capability to perform fault analysis to the level of, at a minimum: a. Subsystem b. Equipment	IR1: to extent SMC-3300 is performed. To the extent of networks and host O/S.	C-MSS-60370	IR1	The MSS Fault Management Application Service at the SMC shall be capable of sending gathered isolation, location, identification and characterization of reported faults data to the level of subsystem and equipment to the following: a. the site Fault Management Applications b. other external systems as defined in Section 5.1 of the current version of 304-CD-003.
SMC-4315#A	The LSM shall, at a minimum, isolate, locate, and identify faults, identify subsystem, equipment, and software faults, and identify the nature of the faults within its element.		C-MSS-60220	A	The MSS Fault Management Application Service shall have the capability to send the notification of a fault to registered recipients.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.
			C-MSS-60395	A	The MSS Fault Management Application Service shall be capable of retrieving records of detected fault.
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-60380	IR1	The MSS Fault Management Application Service at the sites shall isolate, locate, and identify faults, identify subsystem, equipment and software faults, and identify the nature of the faults detected within its site.
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.
			C-MSS-60190	IR1	The MSS Fault Management Application Service shall use the Logging Services to record each detected fault.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults :
					    a. a change in the color of an icon on a display
					    b. a message in a pop-up notification window
					    c. logging the following fault information to a disk log file:
					        1. fault type
					        2. date and time of occurrence of the fault
					        3. identification of the source of the notification (e.g. IP address, process name, etc.)
					        4. fault data received with the notification
					        5. operator-defined descriptive text
					    d. audible alert

SMC-4315#B	The LSM shall, at a minimum, isolate, locate, and identify faults, identify subsystem, equipment, and software faults, and identify the nature of the faults within its element.		C-MSS-60220	A	The MSS Fault Management Application Service shall have the capability to send the notification of a fault to registered recipients.
			C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.
			C-MSS-60395	A	The MSS Fault Management Application Service shall be capable of retrieving records of detected fault.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events: a. communications software version mismatch errors b. communication software configuration errors c. the following errors in communication hardware: 1. host not reachable 2. router not reachable 3. errors and failures of communication links d. Errors in the communications protocols supported e. degradation of performance due to established thresholds being exceeded f. Peripherals g. Databases h. Applications: 1. process missing (Application or COTS product) 2. process in a loop 3. process failed
			C-MSS-60380	IR1	The MSS Fault Management Application Service at the sites shall isolate, locate, and identify faults, identify subsystem, equipment and software faults, and identify the nature of the faults detected within its site.
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.
			C-MSS-60190	IR1	The MSS Fault Management Application Service shall use the Logging Services to record each detected fault.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text

			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults :
					  a. a change in the color of an icon on a display
					  b. a message in a pop-up notification window
					  c. logging the following fault information to a disk log file:
					    1. fault type
					    2. date and time of occurrence of the fault
					    3. identification of the source of the notification (e.g. IP address, process name, etc.)
					    4. fault data received with the notification
					    5. operator-defined descriptive text
					  d. audible alert

SMC-4315#Ir1	The LSM shall, at a minimum, isolate, locate, and identify faults, identify subsystem, equipment, and software faults, and identify the nature of the faults within its element.	This requirement is supported to the extent that it is supported by the network, host operating systems, and the configured Ir1 COTS packages used for system management at the EDF. Ir1 does not provide an LSM.	C-MSS-60130	IR1	The MSS Fault Management Application Service shall provide the capability to detect the following types of faults, errors and events:
					  a. communications software version mismatch errors
					  b. communication software configuration errors
					  c. the following errors in communication hardware:
					    1. host not reachable
					    2. router not reachable
					    3. errors and failures of communication links
					  d. Errors in the communications protocols supported
					  e. degradation of performance due to established thresholds being exceeded
					  f. Peripherals
					  g. Databases
					  h. Applications:
					    1. process missing (Application or COTS product)
					    2. process in a loop
					    3. process failed

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60380	IR1	The MSS Fault Management Application Service at the sites shall isolate, locate, and identify faults, identify subsystem, equipment and software faults, and identify the nature of the faults detected within its site.
			C-MSS-60150	IR1	The MSS Fault Management Application Service shall have the capability to receive fault notifications from the Management Agent Service.
			C-MSS-60190	IR1	The MSS Fault Management Application Service shall use the Logging Services to record each detected fault.
			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults : a. a change in the color of an icon on a display b. a message in a pop-up notification window c. logging the following fault information to a disk log file: 1. fault type 2. date and time of occurrence of the fault 3. identification of the source of the notification (e.g. IP address, process name, etc.) 4. fault data received with the notification 5. operator-defined descriptive text d. audible alert
SMC-4320#A	SMC shall support fault diagnosis testing to include, at a minimum: a. Software and hardware tolerance testing b. Resource-to-resource connectivity testing		C-MSS-60330	A	The MSS Fault Management Application Service at each site shall have the capability to perform periodic testing of all ECS communication links at that site to verify that they are operational.
			C-MSS-60340	IR1	The MSS Fault Management Application Service shall be capable of verifying the operational status of a host.
SMC-4320#B	SMC shall support fault diagnosis testing to include, at a minimum: a. Software and hardware tolerance testing b. Resource-to-resource connectivity testing		C-MSS-60330	A	The MSS Fault Management Application Service at each site shall have the capability to perform periodic testing of all ECS communication links at that site to verify that they are operational.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60303	B	The Fault Management Application Service shall have the capability to send diagnostic test requests to the ISS.
			C-MSS-60305	B	The Fault Management Application Service shall have the capability to receive diagnostic test results from the ISS.
			C-MSS-60340	IR1	The MSS Fault Management Application Service shall be capable of verifying the operational status of a host.
SMC-4320#Ir1	SMC shall support fault diagnosis testing to include, at a minimum: b. Resource-to-resource connectivity testing	IR1: to extent SMC-3300 is performed. To the extent of network and host O/S.	C-MSS-60340	IR1	The MSS Fault Management Application Service shall be capable of verifying the operational status of a host.
SMC-4325#A	The LSM shall request fault diagnosis testing be performed, including, at a minimum: a. Software and hardware tolerance testing b. Resource-to-resource connectivity testing within its element		C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.
			C-MSS-60360	A	The MSS Fault Management Application Service shall provide the capability to execute vendor diagnostics in order to diagnose faults traced to hardware equipment.
			C-MSS-60310	IR1	The MSS Fault Management Application Service shall provide utilities to perform diagnostics and testing of the following for the purpose of fault isolation: a. connectivity between pairs of ECS hosts and ECS routers b. ability to reach hosts and routers c. availability of network services at hosts
			C-MSS-60340	IR1	The MSS Fault Management Application Service shall be capable of verifying the operational status of a host.
SMC-4325#B	The LSM shall request fault diagnosis testing be performed, including, at a minimum: a. Software and hardware tolerance testing b. Resource-to-resource connectivity testing within its element		C-MSS-60350	A	The MSS Fault Management Application Service shall have the capability to periodically execute diagnostic tests in order to isolate, characterize and identify a fault.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60360	A	The MSS Fault Management Application Service shall provide the capability to execute vendor diagnostics in order to diagnose faults traced to hardware equipment.

			C-MSS-60310	IR1	The MSS Fault Management Application Service shall provide utilities to perform diagnostics and testing of the following for the purpose of fault isolation:
					    a. connectivity between pairs of ECS hosts and ECS routers
					    b. ability to reach hosts and routers
					    c. availability of network services at hosts

			C-MSS-60340	IR1	The MSS Fault Management Application Service shall be capable of verifying the operational status of a host.

SMC-4325#Ir1	The LSM shall request fault diagnosis testing be performed, including, at a minimum:
	b. Resource-to-resource connectivity testing within its element
		IR1: b to extent of SMC-3305	C-MSS-60310	IR1	The MSS Fault Management Application Service shall provide utilities to perform diagnostics and testing of the following for the purpose of fault isolation:
					    a. connectivity between pairs of ECS hosts and ECS routers
					    b. ability to reach hosts and routers
					    c. availability of network services at hosts

			C-MSS-60340	IR1	The MSS Fault Management Application Service shall be capable of verifying the operational status of a host.
SMC-4330#A	SMC shall have the capability to generate fault recovery commands, directives, and instructions to sites and elements except for faults directly related to flight operations.	A: Performed by M&O staff using e-mail and/or phone	C-MSS-60510	A	The MSS EMC Fault Management Application Service at the SMC shall coordinate, as necessary via directives and instructions, the recovery from faults reported from a site.
			C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60530	A	The MSS Fault Management Application Service shall provide the capability to pass parameters to action routines.
			C-MSS-60420	A	The MSS Fault Management Application Service shall interface with the MSS Configuration Management Application Service and schedule a change in the configuration of the site when such a change in the configuration of the site is deemed necessary to recover from a fault.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults : a. a change in the color of an icon on a display b. a message in a pop-up notification window c. logging the following fault information to a disk log file: 1. fault type 2. date and time of occurrence of the fault 3. identification of the source of the notification (e.g. IP address, process name, etc.) 4. fault data received with the notification 5. operator-defined descriptive text d. audible alert
SMC-4330#B	SMC shall have the capability to generate fault recovery commands, directives, and instructions to sites and elements except for faults directly related to flight operations.	B: Full capability using system fault management tools	C-MSS-60510	A	The MSS EMC Fault Management Application Service at the SMC shall coordinate, as necessary via directives and instructions, the recovery from faults reported from a site.
			C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60530	A	The MSS Fault Management Application Service shall provide the capability to pass parameters to action routines.
			C-MSS-60420	A	The MSS Fault Management Application Service shall interface with the MSS Configuration Management Application Service and schedule a change in the configuration of the site when such a change in the configuration of the site is deemed necessary to recover from a fault.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60200	IR1	The MSS Fault Management Application Service shall have the capability to generate the following types of notifications for detected faults : a. a change in the color of an icon on a display b. a message in a pop-up notification window c. logging the following fault information to a disk log file: 1. fault type 2. date and time of occurrence of the fault 3. identification of the source of the notification (e.g. IP address, process name, etc.) 4. fault data received with the notification 5. operator-defined descriptive text d. audible alert
SMC-4335#A	The LSM shall generate fault recovery commands, directives, and instructions within its element.	A: Partial compliance - manual or semi-automated	C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60530	A	The MSS Fault Management Application Service shall provide the capability to pass parameters to action routines.
			C-MSS-60540	A	The MSS Fault Management Application Service shall utilize office automation support tools for the generation of directives and instructions for recovery from faults within its site.
			C-MSS-60420	A	The MSS Fault Management Application Service shall interface with the MSS Configuration Management Application Service and schedule a change in the configuration of the site when such a change in the configuration of the site is deemed necessary to recover from a fault.
SMC-4335#B	The LSM shall generate fault recovery commands, directives, and instructions within its element.	B: Fully automated	C-MSS-60520	A	The MSS Fault Management Application Service shall provide the capability to allow the specification and execution of action routines in response to the notification of a fault.
			C-MSS-60530	A	The MSS Fault Management Application Service shall provide the capability to pass parameters to action routines.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-60540	A	The MSS Fault Management Application Service shall utilize office automation support tools for the generation of directives and instructions for recovery from faults within its site.
			C-MSS-60420	A	The MSS Fault Management Application Service shall interface with the MSS Configuration Management Application Service and schedule a change in the configuration of the site when such a change in the configuration of the site is deemed necessary to recover from a fault.
SMC-5300#A	The SMC shall, in conjunction with sites and elements, establish, support, maintain, and update security policies and procedures to include, at a minimum: a. Physical security b. Password management c. Operational security d. Data security e. Privileges f. Network security g. Compromise mitigation	A: Performed by M&O staff using office automation tools or IMS-style text management	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			S-PLS-01330	A	The PLANG CI shall restrict the functions available to operators depending on operations role, (e.g., to permit the resource manager role to enter ground events, but to restrict that role from being able to enter production requests).
SMC-5300#B	The SMC shall, in conjunction with sites and elements, establish, support, maintain, and update security policies and procedures to include, at a minimum: a. Physical security b. Password management c. Operational security d. Data security e. Privileges f. Network security g. Compromise mitigation	B: Full capability - possibly automated.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			S-PLS-01330	A	The PLANG CI shall restrict the functions available to operators depending on operations role, (e.g., to permit the resource manager role to enter ground events, but to restrict that role from being able to enter production requests).
			C-MSS-70600	B	The EMC Security Management Application Service shall maintain security policies and procedures to include physical security, password management, operational security, data security, privileges, network security and compromise mitigation.
SMC-5305#A	The LSM shall maintain security policies and procedures, including, at a minimum: a. Physical security b. Password management c. Operational security d. Data classifications e. Access/privileges f. Compromise mitigation	A: Partial compliance - performed by M&O staff using office automation tools	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-5305#B	The LSM shall maintain security policies and procedures, including, at a minimum: a. Physical security b. Password management c. Operational security d. Data classifications e. Access/privileges f. Compromise mitigation	B: Full capability	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-5320#A	The SMC shall establish, maintain, and authenticate access privileges for ECS scientific users.		C-MSS-70010	IR1	The MSS Security Management Application Service shall provide the capability to create, modify and delete user accounts with the following attributes: a. username b. password c. group identification code d. user identification code e. login directory f. command line interpreter
			C-MSS-70020	IR1	The MSS Security Management Application Service shall enable the assignment of user accounts to groups based on the group identification code.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-CSS-21000	IR1	The CSS Security service shall provide an API to verify the identity of users.
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a.　　Authentication Database b.　　Authorization Database c.　　Network Database
SMC-5320#B	The SMC shall establish, maintain, and authenticate access privileges for ECS scientific users.		C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-MSS-75120	B	The Accountability Service shall have the capability to receive user registration status requests from the CLS.
			C-MSS-75125	B	The Accountability Service shall have the capability to receive user comment survey requests from the CLS.
			C-CSS-21000	IR1	The CSS Security service shall provide an API to verify the identity of users.

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a. Authentication Database b. Authorization Database c. Network Database
SMC-5320#Ir1	The SMC shall establish, maintain, and authenticate access privileges for ECS scientific users.		C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-CSS-21000	IR1	The CSS Security service shall provide an API to verify the identity of users.
SMC-5325#A	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.		C-MSS-10100	A	The MSS shall interface with the EDOS to exchange data identified in Table 5.1-1 as specified in EDOS/EGS IRD, 560-EDOS-0211.
			C-MSS-70010	IR1	The MSS Security Management Application Service shall provide the capability to create, modify and delete user accounts with the following attributes: a. username b. password c. group identification code d. user identification code e. login directory f. command line interpreter
			C-MSS-70020	IR1	The MSS Security Management Application Service shall enable the assignment of user accounts to groups based on the group identification code.
			C-MSS-70110	A	The MSS site Security Management Application Service shall provide the capability to specify privileges for authorized users and user groups for access to ECS resources.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70120	IR1	The MSS site Security Management Application service shall provide the mechanism, for each ECS host, to allow or deny incoming requests from specific hosts to services.
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a.　　Authentication Database b.　　Authorization Database c.　　Network Database
SMC-5325#B	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.		C-MSS-70110	A	The MSS site Security Management Application Service shall provide the capability to specify privileges for authorized users and user groups for access to ECS resources.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-MSS-70120	IR1	The MSS site Security Management Application service shall provide the mechanism, for each ECS host, to allow or deny incoming requests from specific hosts to services.
			C-MSS-70130	IR1	The MSS site Security Management Application Service shall provide a command line interface and a GUI for the management of the following security databases: a.　　Authentication Database b.　　Authorization Database c.　　Network Database

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-5325#Ir1	The LSM shall promulgate, maintain, authenticate, and monitor user and device accesses and privileges.	This requirement is supported as follows: Authentication is performed only at the host level, and only on the SSI&T Workstations and the SSI&T processor. The maintenance and monitoring of privileges is performed by the operations staff. Ir1 does not provide an LSM.	C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-MSS-70120	IR1	The MSS site Security Management Application service shall provide the mechanism, for each ECS host, to allow or deny incoming requests from specific hosts to services.
			C-MSS-70100	IR1	The MSS site Security Management Application Service shall provide the capability to set, maintain, and update access control information for ECS resources.
SMC-5330#A	The SMC shall provide support, manage, maintain, and request security testing that includes, at a minimum, password checking and control of site and element internal privileges.		C-MSS-70330	A	The MSS EMC Security Management Application Service shall have the capability to request, support, coordinate and maintain security testing for sites.
			C-MSS-70340	A	The MSS EMC Security Management Application Service shall have the capability to request security testing of the sites on a scheduled and an interactive basis
			C-MSS-70350	A	The MSS EMC Security Management Application Service shall have the capability to receive the results of security tests performed at the sites.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21100	IR1	The CSS Security service shall provide an API to challenge the client/server to authenticate itself at the following three levels. a.　　connect level b.　　request level c.　　packet level
SMC-5330#B	The SMC shall provide support, manage, maintain, and request security testing that includes, at a minimum, password checking and control of site and element internal privileges.		C-MSS-70330	A	The MSS EMC Security Management Application Service shall have the capability to request, support, coordinate and maintain security testing for sites.
			C-MSS-70340	A	The MSS EMC Security Management Application Service shall have the capability to request security testing of the sites on a scheduled and an interactive basis
			C-MSS-70350	A	The MSS EMC Security Management Application Service shall have the capability to receive the results of security tests performed at the sites.
			C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.
			C-CSS-21100	IR1	The CSS Security service shall provide an API to challenge the client/server to authenticate itself at the following three levels. a.　　connect level b.　　request level c.　　packet level
SMC-5330#Ir1	The SMC shall provide support, manage, maintain, and request security testing that includes, at a minimum, password checking.	This requirement is supported as follows: Ir1 shall restrict access to Ir1, by users and principals, by means of a password verification mechanism, at both the DCE-cell and host level. Ir1 does not provide an LSM.	C-CSS-21020	IR1	The CSS Security service shall provide the capability to create/modify/delete user accounts and privileges in the security registry.
			C-CSS-21030	IR1	The CSS Security service shall provide the capability to define/modify/delete group information in the security registry.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-CSS-21100	IR1	The CSS Security service shall provide an API to challenge the client/server to authenticate itself at the following three levels. a. connect level b. request level c. packet level
SMC-5335#A	The LSM shall perform security testing that includes, at a minimum, password auditing and element internal access/privileges checking.		C-MSS-70310	A	The MSS site Security Management Application Service shall have the capability to perform security testing on a periodic and on an interactive basis.
			C-MSS-70320	A	The MSS site Security Management Application Service shall have the capability to send the results of the tests to the EMC Security Management Application Service.
			C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information
SMC-5335#B	The LSM shall perform security testing that includes, at a minimum, password auditing and element internal access/privileges checking.		C-MSS-70310	A	The MSS site Security Management Application Service shall have the capability to perform security testing on a periodic and on an interactive basis.
			C-MSS-70320	A	The MSS site Security Management Application Service shall have the capability to send the results of the tests to the EMC Security Management Application Service.
			C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-5335#Ir1	The LSM shall perform security testing that includes, at a minimum, password auditing and element internal access/privileges checking.	This requirement is supported by the operations staff at the EDF. Ir1 does not provide an LSM.	C-MSS-70300	IR1	The MSS site Security Management Application Service shall have the capability to perform the following types of security tests: a. password auditing b. file system integrity checking c. auditing of user privileges d. auditing of resource access control information
SMC-5340#A	The SMC shall perform security risk analyses and compromise detection.	A: Performed by M&O staff using detection tools	C-MSS-70400	A	The MSS EMC Security Management Application Service shall have the capability to receive notifications of security events from the site Security Management Application Services.
			C-MSS-70410	A	The MSS EMC Security Management Application Service shall have the capability to receive security audit trails from the site Security Management Application Services.
			C-MSS-70420	A	The MSS EMC Security Management Application Service shall have the capability to analyze security audit trails for the purpose of detecting intrusions.
SMC-5340#B	The SMC shall perform security risk analyses and compromise detection.	B: Fully automated.	C-MSS-70400	A	The MSS EMC Security Management Application Service shall have the capability to receive notifications of security events from the site Security Management Application Services.
			C-MSS-70410	A	The MSS EMC Security Management Application Service shall have the capability to receive security audit trails from the site Security Management Application Services.
			C-MSS-70420	A	The MSS EMC Security Management Application Service shall have the capability to analyze security audit trails for the purpose of detecting intrusions.
SMC-5345#A	The LSM shall perform compromise (e.g., virus or worm penetration) risk analysis, and detection.		C-MSS-70430	A	The MSS site Security Management Application Service shall provide the capability to designate a user or a group of users to receive a notification upon the detection of an intrusion, virus or worm.
			C-MSS-70440	A	The MSS site Security Management Application Service shall provide the capability to notify designated M&O staff(s) upon the detection of an intrusion, virus or worm.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70450	A	The MSS site Security Management Application Service shall have the capability to detect the following types of intrusions: a. Login failures b. Unauthorized access to ECS resources c. Break-ins d. Viruses and worms
SMC-5345#B	The LSM shall perform compromise (e.g., virus or worm penetration) risk analysis, and detection.		C-MSS-70430	A	The MSS site Security Management Application Service shall provide the capability to designate a user or a group of users to receive a notification upon the detection of an intrusion, virus or worm.
			C-MSS-70440	A	The MSS site Security Management Application Service shall provide the capability to notify designated M&O staff(s) upon the detection of an intrusion, virus or worm.
			C-MSS-70450	A	The MSS site Security Management Application Service shall have the capability to detect the following types of intrusions: a. Login failures b. Unauthorized access to ECS resources c. Break-ins d. Viruses and worms
SMC-5350#A	The SMC shall have the capability to initiate recovery procedures in response to a detected security compromise.	A: Performed by M&O staff	C-MSS-70500	A	The MSS EMC Security Management Application Service shall have the capability to coordinate with the site Security Management Application Services, via directives and instructions, the recovery from security compromises.
SMC-5350#B	The SMC shall have the capability to initiate recovery procedures in response to a detected security compromise.	B: Fully automated	C-MSS-70500	A	The MSS EMC Security Management Application Service shall have the capability to coordinate with the site Security Management Application Services, via directives and instructions, the recovery from security compromises.
SMC-5355#A	The LSM shall isolate the compromised area, detach the compromised input I/O, and the compromised areas output I/O until the compromise has been eliminated.		C-MSS-70510	A	The MSS site Security Management Application Service shall, upon the detection of a compromise, isolate the compromised input I/O, and the compromised area's output I/O until the compromise has been eliminated.
SMC-5355#B	The LSM shall isolate the compromised area, detach the compromised input I/O, and the compromised areas output I/O until the compromise has been eliminated.		C-MSS-70510	A	The MSS site Security Management Application Service shall, upon the detection of a compromise, isolate the compromised input I/O, and the compromised area's output I/O until the compromise has been eliminated.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-5360#B	SMC shall have the capability to manage encrypted information, including keys.	B: Fully automated	C-MSS-70515	B	The MSS Security Management Application Service shall have the capability to manage encrypted information, including keys.
SMC-5365#A	The LSM shall generate recovery actions in response to the detection of compromises.		C-MSS-70530	A	The MSS EMC Security Management Application Service shall coordinate, as necessary via directives and instructions, the recovery from security events reported from a site.
			C-MSS-70520	IR1	The MSS EMC Security Management Application Service shall provide office automation support tools to enable the generation of directives and instructions for recovery from detected security events.
SMC-5365#B	The LSM shall generate recovery actions in response to the detection of compromises.		C-MSS-70530	A	The MSS EMC Security Management Application Service shall coordinate, as necessary via directives and instructions, the recovery from security events reported from a site.
			C-MSS-70520	IR1	The MSS EMC Security Management Application Service shall provide office automation support tools to enable the generation of directives and instructions for recovery from detected security events.
SMC-5365#Ir1	The LSM shall generate recovery actions in response to the detection of compromises.	This requirement is supported entirely by the operations staff. Ir1 does not provide an LSM.	C-MSS-70520	IR1	The MSS EMC Security Management Application Service shall provide office automation support tools to enable the generation of directives and instructions for recovery from detected security events.
SMC-6300#A	The SMC shall support, maintain, and update accountability policies and procedures based on ESDIS Project policies and procedures.	A: Partial - Performed by M&O staff using office automation tools	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-6300#B	The SMC shall support, maintain, and update accounting and accountability policies and procedures based on ESDIS Project policies and procedures.	B: Full capability	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
SMC-6301#B	The SMC accounting policies and procedures shall conform with accounting principles, standards, and facilities including: a. General Accounting Office (GAO) Title 2-Accounting and Title 3-Audit b. Office of Management and Budget (OMB) Circular No. A-127, Financial Management Systems c. OMB Circular No. A-130, Management of Federal Information Resources	B: Full capability	C-MSS-78010	B	The MSS Billing/Accounting Application Service (BAAS) functional requirements shall be consistent with the functional requirements defined by the Federal Financial Management System Requirements issued by the Joint Financial Management Improvement Program (JFIMP)
			C-MSS-78030	B	The MSS BAAS shall provide the following major functions: billing & invoicing, accounts receivable, accounts payable, collections, general ledger, cost accounting, and reporting.
SMC-6310#A	The SMC shall perform, as needed, security audit trails.	A: Fully automated	C-MSS-76040	A	The MSS Accountability Management Service shall be capable of reporting audit information to M&O staff via the MUI service.
			C-MSS-76030	A	The MSS Accountability Management Service shall log, for each ECS host, incoming access attempts via: a. telnet b. FTP c. rlogin d. finger.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
SMC-6310#B	The SMC shall perform, as needed, security audit trails.		C-MSS-76040	A	The MSS Accountability Management Service shall be capable of reporting audit information to M&O staff via the MUI service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-76030	A	The MSS Accountability Management Service shall log, for each ECS host, incoming access attempts via: a. telnet b. FTP c. rlogin d. finger.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
SMC-6315#A	The LSM shall perform, as needed, security audit trails within its element.	A: Full compliance	C-MSS-76040	A	The MSS Accountability Management Service shall be capable of reporting audit information to M&O staff via the MUI service.
			C-MSS-76030	A	The MSS Accountability Management Service shall log, for each ECS host, incoming access attempts via: a. telnet b. FTP c. rlogin d. finger.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
SMC-6315#B	The LSM shall perform, as needed, security audit trails within its element.		C-MSS-76040	A	The MSS Accountability Management Service shall be capable of reporting audit information to M&O staff via the MUI service.
			C-MSS-76030	A	The MSS Accountability Management Service shall log, for each ECS host, incoming access attempts via: a. telnet b. FTP c. rlogin d. finger.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
SMC-6320#A	The SMC shall perform, as needed, data and user audit trails.	A: Full compliance	C-MSS-90290	A	The DBMS shall provide an audit trail of chronological activities in the database.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-76000	A	The MSS accountability management service shall be capable of retrieving user activity data (user id, type of user activity, data items used (browsed, searched, or ordered), and date/time of activity) from records generated by the SDPS Data Server, Data Processing, and Client subsystems.
			C-MSS-76010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service user activity data stored in the Management Database.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
			C-MSS-77000	A	The MSS accountability management service shall be capable of retrieving data processing information (instrument used and date/time of ingest or algorithm used (name and version) and date/time or processing) from records generated by the SDPS Data Processing subsystem.
			C-MSS-77010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service all data processing information stored in the Management database.
			C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-77070	A	The MSS accountability management service shall be capable of searching local history logs to find processing data for an ordered data item.

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
SMC-6320#B	The SMC shall perform, as needed, data and user audit trails.		C-MSS-90290	A	The DBMS shall provide an audit trail of chronological activities in the database.
			C-MSS-76000	A	The MSS accountability management service shall be capable of retrieving user activity data (user id, type of user activity, data items used (browsed, searched, or ordered), and date/time of activity) from records generated by the SDPS Data Server, Data Processing, and Client subsystems.
			C-MSS-76010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service user activity data stored in the Management Database.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
			C-MSS-77000	A	The MSS accountability management service shall be capable of retrieving data processing information (instrument used and date/time of ingest or algorithm used (name and version) and date/time or processing) from records generated by the SDPS Data Processing subsystem.
			C-MSS-77010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service all data processing information stored in the Management database.
			C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-77070	A	The MSS accountability management service shall be capable of searching local history logs to find processing data for an ordered data item.
			C-MSS-78480	B	The MSS BAAS Accounts receivable (AR) function shall maintain a history for each account.
			C-MSS-78490	B	The MSS BAAS Accounts Receivable (AR) function shall identify each transaction via reference numbers.
			C-MSS-78500	B	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to purge accounts, removing closed accounts to a history file.
			C-MSS-78810	B	The MSS BAAS Accounts Payable (AP) function shall provide on-line voucher approval by M&O staff.
			C-MSS-78880	B	The MSS BAAS Accounts Payable (AP) function shall assign a status code to each voucher to track its progress through the system.
			C-MSS-78900	B	The MSS BAAS Accounts Payable (AP) function shall allow an on-line query and searching of the voucher history file.
			C-MSS-78910	B	The MSS BAAS Accounts Payable (AP) function shall allow orders to be re-opened by M&O staff after final payment has been made.
			C-MSS-79200	B	The MSS BAAS Collections function shall save all collections history information on particular accounts.
			C-MSS-79640	B	The MSS BAAS General Ledger (GL) function shall maintain a documented trail of any changes conducted by authorized staff on out-of-balance accounts.
			C-MSS-79650	B	The MSS BAAS General Ledger (GL) function shall provide the capability to move accounts to a history file.
			C-MSS-79660	B	The MSS BAAS General Ledger (GL) function shall provide the capability to re-open closed accounts when required.
			C-MSS-79670	B	The MSS BAAS General Ledger (GL) function shall provide the capability to archive data needed for comparative analysis and presentation of historical information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
			C-MSS-79630	B	The MSS BAAS General Ledger (GL) function shall use standardized transactions identified by reference codes to control transaction editing, posting, and updating of information.
SMC-6325#A	The LSM shall perform, as needed, data and user audit trails within its element.		C-MSS-90290	A	The DBMS shall provide an audit trail of chronological activities in the database.
			C-MSS-76000	A	The MSS accountability management service shall be capable of retrieving user activity data (user id, type of user activity, data items used (browsed, searched, or ordered), and date/time of activity) from records generated by the SDPS Data Server, Data Processing, and Client subsystems.
			C-MSS-76010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service user activity data stored in the Management Database.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
			C-MSS-77000	A	The MSS accountability management service shall be capable of retrieving data processing information (instrument used and date/time of ingest or algorithm used (name and version) and date/time or processing) from records generated by the SDPS Data Processing subsystem.
			C-MSS-77010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service all data processing information stored in the Management database.
			C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-77070	A	The MSS accountability management service shall be capable of searching local history logs to find processing data for an ordered data item.
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
SMC-6325#B	The LSM shall perform, as needed, data and user audit trails within its element.		C-MSS-90290	A	The DBMS shall provide an audit trail of chronological activities in the database.
			C-MSS-76000	A	The MSS accountability management service shall be capable of retrieving user activity data (user id, type of user activity, data items used (browsed, searched, or ordered), and date/time of activity) from records generated by the SDPS Data Server, Data Processing, and Client subsystems.
			C-MSS-76010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service user activity data stored in the Management Database.
			C-MSS-76020	A	The MSS accountability management service shall be capable of retrieving all activities associated with a particular user or data item via the Management Data Access service.
			C-MSS-77000	A	The MSS accountability management service shall be capable of retrieving data processing information (instrument used and date/time of ingest or algorithm used (name and version) and date/time or processing) from records generated by the SDPS Data Processing subsystem.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77010	A	The MSS accountability management service shall be capable of querying via the Management Data Access service all data processing information stored in the Management database.
			C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-77070	A	The MSS accountability management service shall be capable of searching local history logs to find processing data for an ordered data item.
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
SMC-6330#A	The SMC shall establish, maintain, and update a data tracking system that, at a minimum: a. Tracks data transport from system input to system output b. Allows the status of all product-production activities to be determined	A: Full compliance for sites, services, components, and products in Rel. A	C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
SMC-6330#B	The SMC shall establish, maintain, and update a data tracking system that, at a minimum: a. Tracks data transport from system input to system output b. Allows the status of all product-production activities to be determined	B: Full capability	C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
SMC-6335#A	The LSM shall, as needed, maintain and update a data tracking system that, at a minimum: a. Tracks data transport from element input to element output b. Allows the status of all product-production activities to be determined	A: Partial compliance since not all sites, services and components are in Rel. A	C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request
SMC-6335#B	The LSM shall, as needed, maintain and update a data tracking system that, at a minimum: a. Tracks data transport from element input to element output b. Allows the status of all product-production activities to be determined	B: Full capability through performance management tools	C-MSS-77030	A	The MSS accountability management service shall be capable of retrieving all data processing information logged for a specified data item.
			C-MSS-77040	A	The MSS accountability management service shall be capable of accepting queries for the status of a particular ordered data item from the SDPS Client subsystem.
			C-MSS-77060	A	The MSS accountability management service shall be capable of reporting the requested status of an ordered data item to the SDPS Client subsystem.
			C-MSS-92510	B	The MSS Report Generation Service shall be capable of generating a Processing Log Report containing the log of product processing events selected by start/stop time, data type identifier, and processing status.
			C-MSS-77050	A	The MSS accountability management service shall be capable of interfacing with the SDPS subsystems to determine the status of an ordered data item to be: a. Request in queue for processing b. Request currently being processed c. Request successfully processed d. Error in request processing e. Error in request

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-6340#A	The SMC shall track system configuration that, at a minimum, audits: a. Hardware resources b. Software resources	A: Full capability	C-MSS-40120	A	The MSS configuration management application service at the SMC shall track the names and identifiers of the following items deployed at the sites: a.　　ECS subsystems, networks, and configured system and network devices such as workstations, servers, and routers b.　　ECS releases and baselines c.　　ECS hardware and software resources designated as configuration items d.　　technical documentation and test materials; e.　　scientific algorithms, including software, data and test materials (DAAC's only) f.　　algorithm processing logic control and calibration coefficients data; g.　　algorithm test documentation, including specifications, data files, and scripts.
			C-MSS-40140	A	The MSS configuration management application service at the SMC shall maintain, and make available system-wide, information identifying the sites where individual versions of configuration items are located and the operational status of that version at the site.
SMC-6340#B	The SMC shall track system configuration that, at a minimum, audits: a. Hardware resources b. Software resources	B: Fully automated	C-MSS-40120	A	The MSS configuration management application service at the SMC shall track the names and identifiers of the following items deployed at the sites: a.　　ECS subsystems, networks, and configured system and network devices such as workstations, servers, and routers b.　　ECS releases and baselines c.　　ECS hardware and software resources designated as configuration items d.　　technical documentation and test materials; e.　　scientific algorithms, including software, data and test materials (DAAC's only) f.　　algorithm processing logic control and calibration coefficients data; g.　　algorithm test documentation, including specifications, data files, and scripts.
			C-MSS-40140	A	The MSS configuration management application service at the SMC shall maintain, and make available system-wide, information identifying the sites where individual versions of configuration items are located and the operational status of that version at the site.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-6345#A	The LSM shall, as needed, perform configuration accountability to include, at a minimum, the audit of hardware and software resources within its element.	A: Full compliance	C-MSS-40010	A	The MSS configuration management application service at each site shall identify versions and variants of configuration controlled resources that comprise the site's operational baseline.
SMC-6345#B	The LSM shall, as needed, perform configuration accountability to include, at a minimum, the audit of hardware and software resources within its element.		C-MSS-40010	A	The MSS configuration management application service at each site shall identify versions and variants of configuration controlled resources that comprise the site's operational baseline.
SMC-6360#B	The SMC shall maintain ESDIS project authorized billing algorithms and rates used to calculate resource utilization costs.	B: Full capability	C-MSS-79780	B	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to processes using authorized cost algorithms.
			C-MSS-79790	B	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to ECS products using authorized cost algorithms.
			C-MSS-79800	B	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to serve different users.
SMC-6370#B	The SMC shall make the billing algorithms available to other elements for the purpose of informing science users of the cost of ECS services.	B: Full Capability	C-MSS-79980	B	The MSS BAAS Reporting function shall allow the transfer of information to other applications outside of the Billing/Accounting Application Service (BAAS).
			C-MSS-78270	B	The MSS BAAS Billing and Invoicing function shall make available to the DSS, pricing algorithms it maintains in standard pricing tables, for the purposes of price estimation.
SMC-6380#B	The SMC shall calculate the resource unit costs associated with processing information from system input to system output.	B: Full Capability	C-MSS-36465	B	The Management Agent Service shall have the capability to receive accounting/resource accountability data from the DPS.
			C-MSS-36520	B	The Management Agent Service shall have the capability to receive resource utilization data from the INS.
			C-MSS-79760	B	The MSS BAAS Cost Accounting function shall provide a trail to assign identifiable sources to all resource unit costs.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-79780	B	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to processes using authorized cost algorithms.
			C-MSS-79790	B	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to ECS products using authorized cost algorithms.
			C-MSS-79800	B	The MSS BAAS Cost Accounting function shall provide the capability to assign resource unit costs to serve different users.
			C-MSS-79850	B	The MSS BAAS Cost Accounting function shall have the capability to access resource unit cost information from the ECS Management Database to determine costs consumed to serve different users.
			C-MSS-79860	B	The MSS BAAS Cost Accounting function shall have the capability to access resource unit cost from the ECS Management Database to enable ECS to allocate costs to different processes and products.
SMC-6385#B	The LSM shall, as needed, calculate the resource unit cost associated with processing information from element input to element output.	B: Full Capability	C-MSS-36520	B	The Management Agent Service shall have the capability to receive resource utilization data from the INS.
SMC-6390#B	The SMC shall establish, maintain, and update resource utilization account information for, at a minimum: a. Individuals b. Groups c. Processes	B: Full Capability	C-MSS-79810	B	The MSS BAAS Cost Accounting function shall provide the capability to establish historical accounts of resource unit costs assigned to individual users.
			C-MSS-79820	B	The MSS BAAS Cost Accounting function shall provide the capability to establish historical accounts of resource unit costs assigned to user groups.
			C-MSS-79830	B	The MSS BAAS Cost Accounting function shall provide the capability to establish historical accounts to track the resource unit costs assigned to different processes.
SMC-6400#B	The SMC shall generate invoices, including billing information for ECS.	B: Full Capability	C-MSS-78100	B	The MSS BAAS Billing & Invoicing function shall generate user account billing statements as well as billing invoices.
			C-MSS-78110	B	The MSS BAAS Billing & Invoicing function shall generate user account billing statements and billing invoices on paper as well as electronic formats.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-78120	B	The MSS BAAS Billing & Invoicing function shall price user activity records using standardized pricing tables.
			C-MSS-78130	B	The MSS BAAS Billing & Invoicing function shall apply credits and adjustments given to a user account over a billing period.
			C-MSS-78150	B	The MSS BAAS Billing & Invoicing function shall accept special rates for specific users/groups.
			C-MSS-78160	B	The MSS BAAS Billing & Invoicing function shall apply any past due amounts to an invoice.
			C-MSS-78140	B	The MSS BAAS Billing & Invoicing function shall apply any "pre-paid" amounts already existing in an account to current user account charges.
SMC-6410#B	The SMC shall perform on a periodic basis the generation and distribution of bills.	B: Full Capability	C-MSS-78180	B	The MSS BAAS Billing & Invoicing function shall provide the capability to consolidate multiple user accounts into a single group account, due from one paying location.
			C-MSS-78190	B	The MSS BAAS Billing & Invoicing function shall generate statement and billing invoice reprints upon request.
			C-MSS-78220	B	The MSS BAAS Billing & Invoicing function shall have access to account billing information from the ECS Management Database (e.g. billing address, bill cycle, payment option).
			C-MSS-78200	B	The MSS BAAS Billing & Invoicing function shall be capable of accessing account activity information from the ECS Management Database to price billable ECS data product request.
			C-MSS-78240	B	The MSS BAAS Billing & Invoicing function shall collect science user activity information from the ECS Management Database daily.
			C-MSS-78260	B	The MSS BAAS Billing & Invoicing function shall provide the capability to generate bill invoices in multiple billing cycles.
SMC-6420#B	The SMC shall perform the accounts payable, accounts receivable, and disposition of receipt accounting functions for ECS.	B: Full Capability	C-MSS-78300	B	The MSS BAAS Accounts Receivable (AR) function shall maintain current updated individual and summary user account balances.
			C-MSS-78320	B	The MSS BAAS Accounts Receivable (AR) function shall allow transactions to be entered in batches.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-78330	B	The MSS BAAS Accounts Receivable (AR) function shall accept manual entry of adjustments and transactions, bypassing batch requirements.
			C-MSS-78340	B	The MSS BAAS Accounts Receivable (AR) function shall record complete and partial receipts of payments.
			C-MSS-78350	B	The MSS BAAS Accounts Receivable (AR) function shall provide the ability to apply receipts to more than one receivable.
			C-MSS-78360	B	The MSS BAAS Accounts Receivable (AR) shall post credit balances and adjustments to user accounts.
			C-MSS-78370	B	The MSS BAAS Accounts Receivable (AR) function shall accept "pre-paid accounts."
			C-MSS-78380	B	The MSS BAAS Accounts Receivable (AR) function shall deduct amounts due from "pre-paid" accounts and show balance remaining.
			C-MSS-78390	B	The MSS BAAS Accounts Receivable (AR) function shall provide the ability to flag "pre-paid" accounts with no balance remaining.
			C-MSS-78410	B	The MSS BAAS Accounts Receivable (AR) function shall process refunds for deposits taken on service.
			C-MSS-78420	B	The MSS BAAS Accounts Receivable (AR) function shall process refunds for overpayments on user charges.
			C-MSS-78430	B	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to apply refunds to outstanding balances or to credit an account for future amounts due if users request it.
			C-MSS-78440	B	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to re-establish a receivable for checks returned due to insufficient funds.
			C-MSS-78510	B	The MSS BAAS Accounts Receivable (AR) function shall have the capability to receive accounts receivable data for sales conducted over-the-counter at a site.
			C-MSS-78520	B	The MSS BAAS Accounts Receivable (AR) function shall provide the capability to communicate revenue information to a NASA accounting system for reporting and deposit.
			C-MSS-78530	B	The MSS BAAS Accounts Receivable (AR) function shall submit user refund requests to a NASA accounting system.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-78700	B	The MSS BAAS Accounts Payable (AP) function shall maintain vendor/payee master files.
			C-MSS-78710	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to update vendor/payee master files.
			C-MSS-78720	B	The MSS BAAS Accounts Payable (AP) function shall maintain payee account balances.
			C-MSS-78730	B	The MSS BAAS Accounts Payable (AP) function shall maintain payee account information to include: a. payee bank account information. b. payee taxpayer identification number and payee type. c. contract terms (e.g., net terms, terms that use discounting,end-of-month terms).
			C-MSS-78740	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to establish "pre-paid" accounts.
			C-MSS-78750	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to establish temporary accounts (e.g., when issuing a refund to a user account).
			C-MSS-78760	B	The MSS BAAS Accounts Payable (AP) function shall support batch entry of invoices.
			C-MSS-78770	B	The MSS BAAS Accounts Payable (AP) function shall support matching of vendor invoices to purchase order line items.
			C-MSS-78780	B	The MSS BAAS Accounts Payable (AP) function shall support matching of vendor invoices to inventory receiving reports.
			C-MSS-78790	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to indicate discrepancies between quantity, type, and cost of goods ordered, received, and invoiced.
			C-MSS-78810	B	The MSS BAAS Accounts Payable (AP) function shall provide on-line voucher approval by M&O staff.
			C-MSS-78820	B	The MSS BAAS Accounts Payable (AP) function shall provide re-routing capabilities for vouchers which are not approved the first time.
			C-MSS-78830	B	The MSS BAAS Accounts Payable (AP) function shall provide the ability to suspend a voucher from further processing.
			C-MSS-78840	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to void a voucher

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-78850	B	The MSS BAAS Accounts Payable (AP) function shall allow M&O staff to break up a voucher into multiple payments when charges on invoice have different due dates.
			C-MSS-78860	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to combine several vouchers for the same vendor into a single payment.
			C-MSS-78870	B	The MSS BAAS Accounts Payable (AP) function shall provide the capability to post payments to "pre-paid" accounts automatically.
			C-MSS-78920	B	The MSS BAAS Accounts Payable (AP) function shall have the capability to access purchase order line items information from the ECS Management Database to match to vendor invoices before authorizing payment of invoices.
			C-MSS-78930	B	The MSS BAAS Accounts Payable (AP) function shall have the capability to access inventory receiving reports information from the ECS Management Database to match to vendor invoices before authorizing payment of invoices.
			C-MSS-78940	B	The MSS BAAS Accounts Payable (AP) function shall transmit vendor invoice payment requests and user refund payment requests to a NASA accounting system
			C-MSS-79100	B	The MSS BAAS Collections function shall identify delinquent accounts; those accounts which have violated ECS-determined account aging parameters.
			C-MSS-79110	B	The MSS BAAS Collections function shall provide the capability to allow ECS-defined collections parameters.
			C-MSS-79120	B	The MSS BAAS Collections function shall provide the capability to override specific accounts from the collections process.
			C-MSS-79140	B	The MSS BAAS Collections function shall generate custom and form dunning letters to delinquent accounts.
			C-MSS-79150	B	The MSS BAAS Collections function shall keep log of contacts and contact attempts with users in delinquent accounts.
			C-MSS-79160	B	The MSS BAAS Collections function shall record payment arrangements made with users.
			C-MSS-79170	B	The MSS BAAS Collections function shall initiate service suspension, cancellation, and restoration as appropriate.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-79180	B	The MSS BAAS Collections function shall calculate amounts declared non-collectible (write-offs).
			C-MSS-79190	B	The MSS BAAS Collections function shall record write-off amounts.
			C-MSS-79500	B	The MSS BAAS General Ledger (GL) function shall set up a chart of accounts.
			C-MSS-79510	B	The MSS BAAS General Ledger (GL) function shall accept entries via balanced batches.
			C-MSS-79520	B	The MSS BAAS General Ledger (GL) function shall accept direct entries by-passing the batches.
			C-MSS-79530	B	The MSS BAAS General Ledger (GL) function shall update and edit each account on-line.
			C-MSS-79540	B	The MSS BAAS General Ledger (GL) function shall provide on-line inquiry capability into account balances.
			C-MSS-79550	B	The MSS BAAS General Ledger (GL) function shall provide the capability for M&O staff to establish standardized transactions.
			C-MSS-79560	B	The MSS BAAS General Ledger (GL) function shall provide the capability for M&O staff to modify standardized transactions.
			C-MSS-79570	B	The MSS BAAS General Ledger (GL) function shall accommodate future period transaction entries.
			C-MSS-79580	B	The MSS BAAS General Ledger (GL) function shall accommodate prior period transaction entries for all periods that are open to posting.
			C-MSS-79590	B	The MSS BAAS General Ledger (GL) function shall provide the capability to automatically create new accounts.
			C-MSS-79600	B	The MSS BAAS General Ledger (GL) function shall perform end-of-period process (trial balances), accruals, and consolidation processes under the control of authorized staff.
			C-MSS-79610	B	The MSS BAAS General Ledger (GL) function shall provide the capability for multiple preliminary end-of-period closings before final closing.
			C-MSS-79620	B	The MSS BAAS General Ledger (GL) function shall provide the capability to post current period data during preliminary end-of-period closings.
			C-MSS-78425	B	The MSS BAAS Accounts Receivable (AR) function shall process refunds for data purchases returned by the user.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-78310	B	The MSS BAAS Accounts Receivable (AR) function shall have the capability to reference all update transactions to the appropriate supporting documents or resources (e.g., billing invoice number).
			C-MSS-78400	B	The MSS BAAS Accounts Receivable (AR) function shall accept purchase orders from users as form of payment.
			C-MSS-78450	B	The MSS BAAS Accounts Receivable (AR) function shall support automatic balancing of the accounts receivable master file.
			C-MSS-78460	B	The MSS BASS Accounts Receivable (AR) shall monitor the aging of individual account receivables.
SMC-7300#A	The SMC shall establish, maintain, and update the authorized users inventory to include, at a minimum: a. Users identifications b. Addresses c. Allowed privileges	A: Full Capability	C-MSS-75020	A	The MSS Accountability Management Service shall create a new user account whenever a new record is added to the user profile database.

			C-MSS-75000	A	The MSS accountability management service shall provide the capability to maintain a user profile database that stores the following information for each registered user:
					a. Name
					b. User ID
					c. Password information
					    1. password
					    2. password expiration date
					d. Assigned privileges
					e. Mailing address
					f. Telephone number
					g. Product shipping address
					h. E-mail address
					i. Organization (optional)
					j. Project affiliation(s) (optional)
					    1. project name
					    2. project principal investigator
					k. User group
					l. Account information
					    1. creation date
					    2. expiration date
					m. Restrictions
					    1. time of day
					    2. location
					    3. type of service

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-75010	A	The MSS accountability management service shall be capable of receiving user profile records entered by M&O personnel.
			C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a. Create/Delete/Get context (key) b. List context. c. Set/Get attributes. d. Create/Delete attributes. e. List attributes. f. Set/Get attribute information.
			C-CSS-20090	A	The CSS Directory service shall define a minimum of 20 user defined attribute types for application users to store/retrieve attribute information.
			C-MSS-75025	A	The MSS Accountability Management Service shall be capable of receiving requests for user profile data from ECS applications.
			C-MSS-75030	A	The MSS Accountability Management Service shall be capable of receiving requests for user profile data from M&O operators.
			C-MSS-75035	A	The MSS Accountability Management Service shall be capable of sending requested user profile data to ECS applications
			C-MSS-75045	A	The MSS Accountability Management Service shall be capable of receiving requests for the status of a specified data order from M&O operators.
			C-MSS-75050	A	The MSS Accountability Management Service shall be capable of receiving requests for user account history data from M&O operators.
			C-MSS-75055	A	The MSS Accountability Management Service shall be capable of sending requested status of a specified data order to M&O operators.
			C-MSS-75057	A	The MSS Accountability Management Service shall be capable of sending requested user account history data to M&O operators.
			C-MSS-76005	A	The MSS Accountability Management Service shall be capable of retrieving user history data for a specified managed resource.
			C-MSS-77005	A	The MSS Accountability Management Service shall be capable of retrieving data processing information for a specified managed resource.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-75040	A	The MSS Accountability Management Service shall be capable of sending requested user profile data to M&O operators.
SMC-7300#B	The SMC shall establish, maintain, and update the authorized users inventory to include, at a minimum: a. Users identifications b. Addresses c. Allowed privileges		C-MSS-75020	A	The MSS Accountability Management Service shall create a new user account whenever a new record is added to the user profile database.
			C-MSS-75010	A	The MSS accountability management service shall be capable of receiving user profile records entered by M&O personnel.
			C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a. Create/Delete/Get context (key) b. List context. c. Set/Get attributes. d. Create/Delete attributes. e. List attributes. f. Set/Get attribute information.
			C-CSS-20090	A	The CSS Directory service shall define a minimum of 20 user defined attribute types for application users to store/retrieve attribute information.
			C-MSS-75025	A	The MSS Accountability Management Service shall be capable of receiving requests for user profile data from ECS applications.
			C-MSS-75030	A	The MSS Accountability Management Service shall be capable of receiving requests for user profile data from M&O operators.
			C-MSS-75035	A	The MSS Accountability Management Service shall be capable of sending requested user profile data to ECS applications
			C-MSS-75045	A	The MSS Accountability Management Service shall be capable of receiving requests for the status of a specified data order from M&O operators.
			C-MSS-75050	A	The MSS Accountability Management Service shall be capable of receiving requests for user account history data from M&O operators.
			C-MSS-75055	A	The MSS Accountability Management Service shall be capable of sending requested status of a specified data order to M&O operators.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-75057	A	The MSS Accountability Management Service shall be capable of sending requested user account history data to M&O operators.
			C-MSS-76005	A	The MSS Accountability Management Service shall be capable of retrieving user history data for a specified managed resource.
			C-MSS-77005	A	The MSS Accountability Management Service shall be capable of retrieving data processing information for a specified managed resource.
			C-MSS-75040	A	The MSS Accountability Management Service shall be capable of sending requested user profile data to M&O operators.

			C-MSS-75001	B	The MSS accountability management service shall provide the capability to maintain a user profile database that stores the following information for each registered user:
					a. Name
					b. User ID
					c. Password information
					  1. password
					  2. password expiration date
					d. Assigned privileges
					e. Mailing address
					f. Telephone number
					g. Product shipping address
					h. E-mail address
					i. Organization (optional) j. Project affiliation(s) (optional)
					  1. project name
					  2. project principal investigator
					k. User group
					l. Account information
					  1. creation date
					  2. expiration date
					m. Restrictions
					  1. time of day
					  2. location
					  3. type of service
					n. Billing address
					o. Payment method

			C-MSS-75015	B	The MSS accountability management service shall provide the capability for M&O Staff to modifying and delete user profile records.
			C-MSS-75105	B	The Accountability Service shall have the capability to receive user registration requests from the CLS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-75115	B	The Accountability Service shall have the capability to receive requests for user profile updates from the CLS.
			C-MSS-75135	B	The Accountability Service shall have the capability to send user registration status to the CLS.
SMC-7310#A	The SMC shall establish, maintain, and update the approved facility and equipment inventory to include, at a minimum: a. Facility and equipment identification b. Addresses c. Allowed accesses to privileges	A: Full capability - allowed accesses to privileges assumed under site-level service control for activated sites and components may be limited for this release.	C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a. Create/Delete/Get context (key) b. List context. c. Set/Get attributes. d. Create/Delete attributes. e. List attributes. f. Set/Get attribute information.
			C-MSS-87500	A	The Physical Configuration Management Service shall be capable of importing floor plans from existing files .
			C-MSS-87510	A	The Physical Configuration Management Service shall provide a graphical interface for adding to and editing the existing floor plan.
			C-MSS-87520	A	The Physical Configuration Management Service shall be capable, through interfacing with the ECS Management framework, of determining and storing information regarding physical components.
			C-MSS-87530	A	The Physical Configuration Management Service shall be capable of determining and storing the following information regarding physical components: a. physical device identification b. physical device information c. physical device location d. physical device status
			C-MSS-87540	A	The Physical Configuration Management Service shall have the capability to augment the information obtained from ECS Management framework on each component with additional information.
			C-MSS-87550	A	The Physical Configuration Management Service shall have the capability to allow the entry and storage of information regarding additional physical components that cannot be discerned through the ECS Management framework.
			C-MSS-87560	A	The Physical Configuration Management Service shall provide a graphical interface for viewing the physical location of system components on the floor plans.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-87570	A	The Physical Configuration Management Service shall provide a graphical interface for changing the location of the system components.
			C-MSS-87580	A	The Physical Configuration Management Service shall be capable of maintaining the following information for all of the physical system components: a. Inventory data (name, purchase date, purchase price, installation date, manufacturer, serial number, physical location) b. Network data (network location, protocols) c. Maintenance data (maintenance date)
			C-MSS-87590	A	The Physical Configuration Management Service shall be capable of interfacing with the Management Database in order to store and retrieve data.
			C-MSS-87600	A	The Physical Configuration Management Service shall provide a standard set of reports against this data.
			C-MSS-87610	A	The Physical Configuration Management Service shall provide the ability to produce custom reports against this data.
			C-MSS-87620	A	The Physical Configuration Management Service shall provide tight integration with the Trouble Ticketing (TT) System including allowing direct access of the TT through the Physical Configuration Management Interface.
			C-MSS-87630	A	The Physical Configuration Management Service shall provide the ability to interface with the ECS Management framework to capture status information on each component.
			C-MSS-87640	A	The Physical Configuration Management Service shall provide the ability to display the status obtained above within the graphical interface.
SMC-7310#B	The SMC shall establish, maintain, and update the approved facility and equipment inventory to include, at a minimum: a. Facility and equipment identification b. Addresses c. Allowed accesses to privileges	B: Fully automated	C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a. Create/Delete/Get context (key) b. List context. c. Set/Get attributes. d. Create/Delete attributes. e. List attributes. f. Set/Get attribute information.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-7320#A	The SMC shall establish, maintain, and update the system profile, as opposed to science data profile, inventory to include, at a minimum: a. Data identifications b. Data purposes c. Data locations d. Data classifications (proprietary, open, confidential, etc.) e. Data priorities	A: Performed by M&O Staff using office automation tools	C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a.　　Create/Delete/Get context (key) b.　　List context. c.　　Set/Get attributes. d.　　Create/Delete attributes. e.　　List attributes. f.　　Set/Get attribute information.
SMC-7320#B	The SMC shall establish, maintain, and update the system profile, as opposed to science data profile, inventory to include, at a minimum: a. Data identifications b. Data purposes c. Data locations d. Data classifications (proprietary, open, confidential, etc.) e. Data priorities	B: Full Capability	C-CSS-20000	A	The CSS Directory service shall provide the basic functionality to save and retrieve information into the local namespace: a.　　Create/Delete/Get context (key) b.　　List context. c.　　Set/Get attributes. d.　　Create/Delete attributes. e.　　List attributes. f.　　Set/Get attribute information.
			C-MSS-75060	B	The MSS accountability management service shall provide the capability to maintain a system profile inventory database of ECS software and non product data.
			C-MSS-75070	B	The system profile inventory database shall store the following information for each inventory entry: Data ID, Data purpose, Data location, Data classification and Data priority.
			C-MSS-75080	B	The MSS accountability management service shall be capable of receiving new system profile inventory records entered by M&O Staff.
			C-MSS-75090	B	The MSS accountability management service shall provide the capability for M&O Staff to modify and delete system profile inventory records .
SMC-8300#A	The SMC shall have a generalized report generator with the capability to customize output reports covering, at a minimum, data previously captured in a management DBMS including: a. All or portions of the system b. Variable amounts of time	A: Full Capability	C-MSS-90020	A	The DBMS shall support a client-server design paradigm with distributed data allocation.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90070	A	The DBMS shall be in compliance with the SQL-2 of Federal Information Processing System Publication (FIPS PUB) 127-1.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90170	A	The DBMS shall provide the following bulk data load capabilities: a. direct writes from data files to database b. loading of files containing fixed and variable length records c. incremental bulk load d. Maintain indexes during data loads
			C-MSS-90200	A	The DBMS shall perform on-line disk management functions to include: a. Relocation of database files to different disks b. Expansion of database size by adding new physical data files to it on-line c. Dynamic pre-allocation of contiguous space for tables d. Database objects and indexes can span physical files e. Database objects and indexes can exist on different disks
			C-MSS-90210	A	The DBMS shall support the following features: a. Data compression of nulls and variable length character strings, and indexes b. Space reclaimed from deleted records automatically c. Variable-length column storage
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90500	A	The Report Generator shall be compatible with the DBMS.
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90080	A	The DBMS shall support mathematical operations to generate statistics from management data to include: a. average b. maximum c. minimum d. standard deviation e. sum f. count g. variance
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-90120	A	The DBMS shall be compatible with the ECS management framework to support the import of the ECS management framework data.
			C-MSS-90150	IR1	The DBMS shall support access structures (i.e., single-level indexes, multilevel indexes) to improve the efficiency of retrieval of management data.
			C-MSS-90570	IR1	The Report Generator shall have the capability to generate charts and graphs (e.g., bar, pie, line, etc.) from management data maintained in the DBMS.
SMC-8300#B	The SMC shall have a generalized report generator with the capability to customize output reports covering, at a minimum, data previously captured in a management DBMS including: a. All or portions of the system b. Variable amounts of time		C-MSS-90020	A	The DBMS shall support a client-server design paradigm with distributed data allocation.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90070	A	The DBMS shall be in compliance with the SQL-2 of Federal Information Processing System Publication (FIPS PUB) 127-1.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90170	A	The DBMS shall provide the following bulk data load capabilities: a. direct writes from data files to database b. loading of files containing fixed and variable length records c. incremental bulk load d. Maintain indexes during data loads
			C-MSS-90200	A	The DBMS shall perform on-line disk management functions to include: a. Relocation of database files to different disks b. Expansion of database size by adding new physical data files to it on-line c. Dynamic pre-allocation of contiguous space for tables d. Database objects and indexes can span physical files e. Database objects and indexes can exist on different disks
			C-MSS-90210	A	The DBMS shall support the following features: a. Data compression of nulls and variable length character strings, and indexes b. Space reclaimed from deleted records automatically c. Variable-length column storage
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a.　　　title b.　　　header c.　　　footer d.　　　page number e.　　　date/time of report
			C-MSS-90500	A	The Report Generator shall be compatible with the DBMS.
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90080	A	The DBMS shall support mathematical operations to generate statistics from management data to include: a. average b. maximum c. minimum d. standard deviation e. sum f. count g. variance
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-90120	A	The DBMS shall be compatible with the ECS management framework to support the import of the ECS management framework data.
			C-MSS-45040	B	The MSS Inventory/Logistics Management Service at the SMC shall generate site and multi-site inventory reports for printout and display.
			C-MSS-45090	B	The MSS Inventory/Logistics Management Service shall generate site inventory reports for printout and display.
			C-MSS-45220	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print information concerning site spare parts order information.
			C-MSS-45250	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print site spare parts (orders) information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-45290	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print site consumable item information.
			C-MSS-45310	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print sites' consumable items orders information.
			C-MSS-51010	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print training information.
			C-MSS-51020	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print training records information.
			C-MSS-51030	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print site training requirements information.
			C-MSS-51060	B	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store, view/print, and disseminate training courses descriptions, course prerequisites, resource requirements, and schedules.
			C-MSS-51070	B	The MSS Training Management Service shall provide the capability to retrieve and view/print training courses and schedules information from a SMC training information repository.
			C-MSS-51080	B	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store, and view/print a list of self study, supervisory, and testing requirements for each of the OJT designated ECS positions.
			C-MSS-51090	B	The MSS Training Management Service at the SMC shall provide the capability to prepare, update, store copy of, and view/print training material.
			C-MSS-52020	B	The MSS Policy and Procedures Management Service shall provide the capability to access, select, and display/print ECS policies and procedures.
			C-MSS-52030	B	The MSS Policy and Procedures Management Service shall provide the capability to input, store, maintain, and view/print site specific policies and procedures.
			C-MSS-92010	B	The MSS Report Generation Service shall be capable of generating standard and ad-hoc reports and queries on all or portions of the management and related data maintained in the management database.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92020	B	The MSS Report Generation Service shall provide a Motif based GUI workbench for use by database specialist M&O staff in generating standard and ad-hoc reports and queries.
			C-MSS-92030	B	The MSS Report Generation Service shall provide an HTML based user interface for use by non-database specialists on the M&O staff in requesting standard reports.
			C-MSS-92040	B	The MSS Report Generation Service shall be capable of outputting generated reports to the user's console, a file, or a printer
			C-MSS-92050	B	The MSS Report Generation Service shall be capable of outputting report query results to a file in a tabular format which can be imported by analysis tools such as spreadsheets
			C-MSS-92060	B	The MSS Report Generation Service shall be capable of outputting reports to a file in an HTML compatible format.
			C-MSS-90150	IR1	The DBMS shall support access structures (i.e., single-level indexes, multilevel indexes) to improve the efficiency of retrieval of management data.
			C-MSS-90570	IR1	The Report Generator shall have the capability to generate charts and graphs (e.g., bar, pie, line, etc.) from management data maintained in the DBMS.
			C-MSS-51115	B	The MSS Training Management Application Service shall make available to the MSS Inventory Management Service, any necessary information about training materials, for the purposes of maintaining these materials as inventory items.
SMC-8305#A	The LSM shall have the same report generator capability as for the SMC, except it shall be limited to generating reports covering only its particular site or its particular element.	A: Full compliance	C-MSS-90020	A	The DBMS shall support a client-server design paradigm with distributed data allocation.
			C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90070	A	The DBMS shall be in compliance with the SQL-2 of Federal Information Processing System Publication (FIPS PUB) 127-1.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90170	A	The DBMS shall provide the following bulk data load capabilities: a. direct writes from data files to database b. loading of files containing fixed and variable length records c. incremental bulk load d. Maintain indexes during data loads
			C-MSS-90200	A	The DBMS shall perform on-line disk management functions to include: a. Relocation of database files to different disks b. Expansion of database size by adding new physical data files to it on-line c. Dynamic pre-allocation of contiguous space for tables d. Database objects and indexes can span physical files e. Database objects and indexes can exist on different disks
			C-MSS-90210	A	The DBMS shall support the following features: a. Data compression of nulls and variable length character strings, and indexes b. Space reclaimed from deleted records automatically c. Variable-length column storage
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90500	A	The Report Generator shall be compatible with the DBMS.
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-90120	A	The DBMS shall be compatible with the ECS management framework to support the import of the ECS management framework data.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-90150	IR1	The DBMS shall support access structures (i.e., single-level indexes, multilevel indexes) to improve the efficiency of retrieval of management data.
			C-MSS-90570	IR1	The Report Generator shall have the capability to generate charts and graphs (e.g., bar, pie, line, etc.) from management data maintained in the DBMS.
SMC-8305#B	The LSM shall have the same report generator capability as for the SMC, except it shall be limited to generating reports covering only its particular site or its particular element.		C-MSS-90020	A	The DBMS shall support a client-server design paradigm with distributed data allocation.
			C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90070	A	The DBMS shall be in compliance with the SQL-2 of Federal Information Processing System Publication (FIPS PUB) 127-1.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90170	A	The DBMS shall provide the following bulk data load capabilities: a. direct writes from data files to database b. loading of files containing fixed and variable length records c. incremental bulk load d. Maintain indexes during data loads
			C-MSS-90200	A	The DBMS shall perform on-line disk management functions to include: a. Relocation of database files to different disks b. Expansion of database size by adding new physical data files to it on-line c. Dynamic pre-allocation of contiguous space for tables d. Database objects and indexes can span physical files e. Database objects and indexes can exist on different disks
			C-MSS-90210	A	The DBMS shall support the following features: a. Data compression of nulls and variable length character strings, and indexes b. Space reclaimed from deleted records automatically c. Variable-length column storage
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90500	A	The Report Generator shall be compatible with the DBMS.
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-90120	A	The DBMS shall be compatible with the ECS management framework to support the import of the ECS management framework data.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-02900	B	The MSS-MHW CI Local Management Server peripheral disk drives shall be capable of retrieving data stored from both the Local Management server data storage data archive.
			C-MSS-90150	IR1	The DBMS shall support access structures (i.e., single-level indexes, multilevel indexes) to improve the efficiency of retrieval of management data.
			C-MSS-90570	IR1	The Report Generator shall have the capability to generate charts and graphs (e.g., bar, pie, line, etc.) from management data maintained in the DBMS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8700#A	The SMC shall have the capability to generate a functional allocation report which gives the current allocation of ground segment functions to the sites and elements, including, at a minimum: a. The allocation of generation and storage function by standard product to each active archive b. The allocation of instrument responsibility to each ICC	A: Manual or semi-automated	C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90140	A	The DBMS shall support, or be accessed via, CSS session-establishment services.
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-8700#B	The SMC shall have the capability to generate a functional allocation report which gives the current allocation of ground segment functions to the sites and elements, including, at a minimum: a. The allocation of generation and storage function by standard product to each active archive b. The allocation of instrument responsibility to each ICC	B: Fully automated	C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90140	A	The DBMS shall support, or be accessed via, CSS session-establishment services.
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a.　the development, modification, recording, and printing of graphic images b.　the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a.　console b.　disk file c.　printer
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　simulates and displays an accountant's worksheet b.　enables revisions and calculations on the displayed worksheet's data c.　enables transfer of the worksheet data to database, word processing and graphics applications d.　enables printing of worksheet information.
			C-MSS-92600	B	The MSS Report Generation Service shall be capable of generating a Functional Allocation Report containing current assignment of: a. standard product generation/ storage responsibility to a segment/ element b. assignment of science instrument support to an ICC
SMC-8705#A	The LSM shall have the capability to generate the same types of reports listed under the SMC report generation service, except that each report shall cover only its particular site or its particular element.	A: Full compliance	C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-8705#B	The LSM shall have the capability to generate the same types of reports listed under the SMC report generation service, except that each report shall cover only its particular site or its particular element.		C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-45090	B	The MSS Inventory/Logistics Management Service shall generate site inventory reports for printout and display.
			C-MSS-45220	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print information concerning site spare parts order information.
			C-MSS-45250	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print site spare parts (orders) information.
			C-MSS-45290	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, update, and view/print site consumable item information.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-45310	B	The MSS Inventory/Logistics Management Service shall provide the capability to input, store, maintain, and view/print sites' consumable items orders information.
			C-MSS-50020	B	The MSS Maintenance Management Service shall provide the M&O staff the capability to produce PM and corrective maintenance reports based on operator entered criteria.
			C-MSS-50040	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print Preventive Maintenance (PM) information for site equipment.
			C-MSS-50050	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print key information concerning PM performed.
			C-MSS-50060	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print corrective maintenance performed (CMP) information.
			C-MSS-51030	B	The MSS Training Management Service shall provide the capability to input, store, maintain, and view/print site training requirements information.
			C-MSS-51070	B	The MSS Training Management Service shall provide the capability to retrieve and view/print training courses and schedules information from a SMC training information repository.
			C-MSS-52020	B	The MSS Policy and Procedures Management Service shall provide the capability to access, select, and display/print ECS policies and procedures.
			C-MSS-52030	B	The MSS Policy and Procedures Management Service shall provide the capability to input, store, maintain, and view/print site specific policies and procedures.
SMC-8710#A	The SMC shall have the capability to generate summary configuration status reports that includes, at a minimum: a. Current status of all hardware, system and scientific software b. Reason why item not currently operational.	A: partial compliance for summary reports	C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8710#B	The SMC shall have the capability to generate summary and detailed configuration status reports that includes, at a minimum: a. Current status of all hardware, system and scientific software b. Reason why item not currently operational.	B: Enhanced functionality provided.	C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
			C-MSS-92610	B	The MSS Report Generation Service shall be capable of generating a Configuration Status Report noting the operational status of all H/W, system S/W and science S/W with a reason why an item is not currently operational
			C-MSS-92620	B	The MSS Report Generation Service shall be capable of generating a System Information Report for a selected managed object containing name, description, contact person, location, and system object identification.
SMC-8730#B	The SMC shall have the capability to generate reports showing detailed and summary information about the maintenance schedule for system hardware, system software, and scientific software, including, at a minimum: a. Routine maintenance schedules b. Non-routine maintenance schedules c. Upgrade maintenance schedule	B: Fully automated	C-MSS-50020	B	The MSS Maintenance Management Service shall provide the M&O staff the capability to produce PM and corrective maintenance reports based on operator entered criteria.
			C-MSS-50040	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print Preventive Maintenance (PM) information for site equipment.
			C-MSS-50050	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print key information concerning PM performed.
			C-MSS-50060	B	The MSS Maintenance Management Service shall provide the capability to input, store, maintain, and view/print corrective maintenance performed (CMP) information.
			C-MSS-92670	B	The MSS Report Generation Service shall be capable of generating a Maintenance Schedule Report on H/W, system S/W and science S/W indicating the type of maintenance (i.e, routine, non-routine and upgrade)

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SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8750#A	The SMC shall have the capability to generate detailed and summary training reports, including, at a minimum: a. Training programs b. Training course schedules c. Training course contents d. Training course locations e. Training attendees	A: semi-automated	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-8750#B	The SMC shall have the capability to generate detailed and summary training reports, including, at a minimum: a. Training programs b. Training course schedules c. Training course contents d. Training course locations e. Training attendees	B: Fully automated	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92680	B	The MSS Report Generation Service shall be capable of generating a Training Program Report containing a. Training programs b. Training schedules c. Training course contents d. Training course locations e. Training attendees
SMC-8770#A	The SMC shall have the capability to generate, at a minimum, detailed and summary reports showing the inventory of: a. Hardware, system, and scientific software b. Spares and consumables	A: Full capability	C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90140	A	The DBMS shall support, or be accessed via, CSS session-establishment services.
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8770#B	The SMC shall have the capability to generate, at a minimum, detailed and summary reports showing the inventory of: a. Hardware, system, and scientific software b. Spares and consumables		C-MSS-90060	A	The DBMS shall provide an SQL interface with query, update, and administrative functions capabilities.
			C-MSS-90520	A	The Report Generator shall have the capability to generate ad hoc reports from management data maintained in the DBMS.
			C-MSS-90140	A	The DBMS shall support, or be accessed via, CSS session-establishment services.
			C-MSS-90530	A	The Report Generator shall provide the capability to format reports to include the report: a. title b. header c. footer d. page number e. date/time of report
			C-MSS-90510	A	The Report Generator shall provide a Motif based Graphical User Interface (GUI) for creating ad hoc reports.
			C-MSS-90600	A	The Report Generator shall provide the capability to redirect generated reports to: a. console b. disk file c. printer
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-92690	B	The MSS Report Generation Service shall be capable of generating an Inventory Status Report containing summary and detailed status information on H/W, system S/W and science S/W and listing spares and consumables status at sites.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8790#A	The SMC shall have the capability to generate, as necessary, a list of proposed enhancements with at least these elements: a. Proposal name b. Description of enhancement c. Rationale d. Impacts e. Costs f. Milestone schedule	A: Full capability for generating list of proposed enhancements.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
SMC-8790#B	The SMC shall have the capability to generate, as necessary, a list of proposed enhancements with at least these elements: a. Proposal name b. Description of enhancement c. Rationale d. Impacts e. Costs f. Milestone schedule	B: Fully implemented	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a. preparation, revision, and recording of documents, messages, reports, and data b. import, transformation, and editing of documents produced by other word processing packages c. insertion of worksheet and graphic images into documents, messages, and reports d. transfer of document, message, and report information to spreadsheet and graphics applications e. printing of documents, messages, reports, and data
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.

SMC RbR to L4 traceability

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92070	B	The MSS Report Generation Service shall be capable of generating an Enhancement Proposal Status Report containing the status of proposed enhancements including: a. name b. description c. rationale d. impacts e. cost to implement f. implementation milestone schedule
SMC-8800#A	The SMC shall have the capability to generate detailed and summary reports indicating the overall performance of the ECS. At a minimum, they shall include: a. Scheduled versus actual data collection, processing, retrieval, and delivery of routine data b. Scheduled versus actual data collection, processing, retrieval, and delivery of user requested data c. Reason(s) for failure to meet schedules d. Quality of the data e. Ground operations event execution f. Number of interactive user requests and timeliness of response g. User feedback	A: Performed by M&O staff using office automation tools.	C-MSS-66280	A	The MSS site performance management application service shall be capable of extracting summarized site status information from logged performance data.
			C-MSS-66180	IR1	The MSS performance management application service shall have the capability to generate the following types of statistics for a configurable period of time for performance data stored in the Management Database: a. average b. median c. maximum d. minimum e. ratios f. rates g. standard deviations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-8800#B	The SMC shall have the capability to generate detailed and summary reports indicating the overall performance of the ECS. At a minimum, they shall include: a. Scheduled versus actual data collection, processing, retrieval, and delivery of routine data b. Scheduled versus actual data collection, processing, retrieval, and delivery of user requested data c. Reason(s) for failure to meet schedules d. Quality of the data e. Ground operations event execution f. Number of interactive user requests and timeliness of response g. User feedback	B: Full capability	C-MSS-66280	A	The MSS site performance management application service shall be capable of extracting summarized site status information from logged performance data.
			C-MSS-92080	B	The MSS Report Generation Service shall be capable of generating a Routine Data Production Performance Detail Report itemizing scheduled vs actual times for data collection, processing, retrieval and delivery along with: a. reason for schedule variance b. data quality c. user feedback
			C-MSS-92090	B	The MSS Report Generation Service shall be capable of generating a Routine Data Production Performance Summary Report containing statistical rollups of scheduled vs actual deviations, data quality, and user feedback for data collection, processing, retrieval, and delivery of routine production data.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92100	B	The MSS Report Generation Service shall be capable of generating a User Requested Data Production Performance Detail Report containing scheduled vs actual times for data collection, processing, retrieval and delivery along with: a. reason for schedule variance b. data quality c. user feedback
			C-MSS-92110	B	The MSS Report Generation Service shall be capable of generating a User Requested Data Production Performance Summary Report containing statistical rollups of scheduled vs actual deviations, data quality, and user feedback for data collection, processing, retrieval, and delivery of routine production data
			C-MSS-92120	B	The MSS Report Generation Service shall be capable of generating a Ground Operations Activity Performance Detail Report containing scheduled vs actual times for ground events such as maintenance, training, reconfiguration. The report shall detail: a. reason for schedule variance b. user feedback
			C-MSS-92130	B	The MSS Report Generation Service shall be capable of generating a Ground Operations Event Performance Summary Report containing statistical rollups of scheduled vs actual deviations for ground events such as maintenance, testing, reconfiguration.
			C-MSS-92260	B	The MSS Report Generation Service shall be capable of generating a Data Distribution Performance Report listing time a request received, assigned, processed, verified, and delivered and variances from nominal.
			C-MSS-92300	B	The MSS Report Generation Service shall be capable of generating a Returned Product Summary Report containing summary list of product returns with reason, cost, site action, and current status.
			C-MSS-92520	B	The MSS Report Generation Service shall be capable of generating a Production and Data Processing Request Status Report containing the list of pending production and user-requested product data processing requests.
			C-MSS-92530	B	The MSS Report Generation Service shall be capable of generating a Planning Workload and Processing Turn-Around Report.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66180	IR1	The MSS performance management application service shall have the capability to generate the following types of statistics for a configurable period of time for performance data stored in the Management Database: a. average b. median c. maximum d. minimum e. ratios f. rates g. standard deviations.
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-8820#A	The SMC shall have the capability to generate detailed and summary reports indicating the product generation status made in processing, reprocessing, and storage of all standard products.	A: Partial compliance	C-MSS-66280	A	The MSS site performance management application service shall be capable of extracting summarized site status information from logged performance data.
			C-MSS-66180	IR1	The MSS performance management application service shall have the capability to generate the following types of statistics for a configurable period of time for performance data stored in the Management Database: a. average b. median c. maximum d. minimum e. ratios f. rates g. standard deviations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-8820#B	The SMC shall have the capability to generate detailed and summary reports indicating the product generation status made in processing, reprocessing, and storage of all standard products.	B: Full capability	C-MSS-66280	A	The MSS site performance management application service shall be capable of extracting summarized site status information from logged performance data.
			C-MSS-92140	B	The MSS Report Generation Service shall be capable of generating a Product Generation Status Detail Report containing the status of all product processing/reprocessing and storage.
			C-MSS-92150	B	The MSS Report Generation Service shall be capable of generating a Product Generation Status Summary Report containing the percent distribution of product generation work within each processing state.
			C-MSS-92510	B	The MSS Report Generation Service shall be capable of generating a Processing Log Report containing the log of product processing events selected by start/stop time, data type identifier, and processing status.
			C-MSS-66180	IR1	The MSS performance management application service shall have the capability to generate the following types of statistics for a configurable period of time for performance data stored in the Management Database: a. average b. median c. maximum d. minimum e. ratios f. rates g. standard deviations.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66310	IR1	The MSS performance management application service shall be capable of retrieving the following science algorithm performance data via the Management Data Access Service: a. algorithm name b. algorithm version c. start time d. stop time e. CPU utilization f. memory utilization g. disk reads h. disk writes
SMC-8840#A	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: a. Resource availability b. Reason for down time c. Resource utilization d. Ability of resource to meet performance criteria e. Short and long-term trend analysis and capacity planning results	A: Full compliance	C-MSS-68030	A	The MSS performance management application service shall be capable of receiving system resource utilization information requests from the SDPS Data Processing subsystem via the Management Agent Service.
			C-MSS-68040	A	The MSS performance management application service shall be capable of providing the following current system resource utilization information to the SDPS Data Processing subsystem via Management Agent Service: a. CPU utilization b. memory utilization c. disk i/o's (per second)
			C-MSS-68050	A	The MSS performance management application service shall be capable of receiving resource utilization information requests from the SDPS Data Server subsystems via Management Agent Service.
			C-MSS-68060	A	The MSS performance management application service shall be capable of providing the following current resource utilization information to the SDPS Data Server subsystem via the Management Agent Service: a. CPU utilization b. memory utilization c. disk I/O's (per second)

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-68070	A	The MSS performance management application service shall be capable of receiving resource utilization information requests from the SDPS Client subsystem via the Management Agent Service.
			C-MSS-68080	A	The MSS performance management application service shall be capable of providing the following current resource utilization information to the SDPS Client subsystem via the Management Agent Service. a. CPU utilization b. memory utilization c. disk I/O's (per second)
			C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
SMC-8840#B	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: a. Resource availability b. Reason for down time c. Resource utilization d. Ability of resource to meet performance criteria e. Short and long-term trend analysis and capacity planning results		C-MSS-68030	A	The MSS performance management application service shall be capable of receiving system resource utilization information requests from the SDPS Data Processing subsystem via the Management Agent Service.
			C-MSS-68040	A	The MSS performance management application service shall be capable of providing the following current system resource utilization information to the SDPS Data Processing subsystem via Management Agent Service: a. CPU utilization b. memory utilization c. disk i/o's (per second)
			C-MSS-68050	A	The MSS performance management application service shall be capable of receiving resource utilization information requests from the SDPS Data Server subsystems via Management Agent Service.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-68060	A	The MSS performance management application service shall be capable of providing the following current resource utilization information to the SDPS Data Server subsystem via the Management Agent Service: a. CPU utilization b. memory utilization c. disk I/O's (per second)
			C-MSS-68070	A	The MSS performance management application service shall be capable of receiving resource utilization information requests from the SDPS Client subsystem via the Management Agent Service.
			C-MSS-68080	A	The MSS performance management application service shall be capable of providing the following current resource utilization information to the SDPS Client subsystem via the Management Agent Service. a. CPU utilization b. memory utilization c. disk I/O's (per second)
			C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
			C-MSS-92160	B	The MSS Report Generation Service shall be capable of generating a Resource Performance Report containing: a. Availability b. Reason for downtime c. Utilization d. Indication of compliance with performance criteria. e. Short and long term trend analysis and capacity planning results
			C-MSS-92170	B	The MSS Report Generation Service shall be capable of generating a CPU Load Report graphically depicting the average number of jobs in the run queue over the last 1, 5, and 15 minute period for each selected node.
			C-MSS-92180	B	The MSS Report Generation Service shall be capable of generating an Interface Traffic Report graphically plotting network packet statistics in real-time for the operator selected SNMP node(s).
			C-MSS-92190	B	The MSS Report Generation Service shall be capable of generating an Ethernet Traffic Report graphically plotting network packet statistics in real-time for the operator selected SNMP node(s).

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92200	B	The MSS Report Generation Service shall be capable of generating an SNMP Traffic Report graphically plotting network packet statistics in real-time for the operator selected SNMP node(s).
			C-MSS-92210	B	The MSS Report Generation Service shall be capable of generating an SNMP Operations Report graphically plotting the number of selected SNMP operations/sec requested to be performed by the SNMP agent on the selected node(s).
			C-MSS-92220	B	The MSS Report Generation Service shall be capable of generating a Site Host Resource Utilization Report indicating minimum/average/maximum measured percent usage of host CPU and memory resources and disk reads and writes over the report interval.
			C-MSS-92230	B	The MSS Report Generation Service shall be capable of generating a SMC Host Resource Utilization Report indicating minimum/average/maximum measured percent usage of SMC host CPU and memory resources and disk reads and writes over the report interval.
			C-MSS-92240	B	The MSS Report Generation Service shall be capable of generating a Disk Space Report which lists the file system space available on a selected managed host node.
SMC-8840#Ir1	The SMC shall have the capability to generate detailed and summary reports indicating the performance of ground resources, including, at a minimum: c. Resource utilization	This capability is provided at the EDF, only.	C-MSS-66020	IR1	The MSS Performance Management Application Service shall be capable of monitoring ethernet-like device performance parameters as specified in IETF RFC 1623.
			C-MSS-66060	IR1	The MSS performance management application service shall be capable of receiving requested performance data from ECS components.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-66100	IR1	The MSS performance management application service shall be capable of retrieving the following data for all hosts: a. total CPU utilization b. memory utilization c. physical disk i/o's d. disk storage size e. disk storage used f. number of active processes g. length of run queue h. network i/o's (packets) i. network errors
			C-MSS-70710	IR1	The MSS Security Management Application Service shall have the capability to generate reports from collected management data.
			C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
			C-MSS-66030	IR1	The MSS performance management application service shall be capable of receiving managed object definitions for each managed object.
			C-MSS-66170	IR1	The MSS performance management application service shall log ECS performance data pertaining to ECS network components and operating system resources.
			C-MSS-70720	IR1	The MSS Security Management Application Service shall have the capability to redirect reports to: a. console b. disk file c. printer
			C-MSS-90570	IR1	The Report Generator shall have the capability to generate charts and graphs (e.g., bar, pie, line, etc.) from management data maintained in the DBMS.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8841#A	The SMC shall have the capability to generate detailed and summary user feedback analysis reports describing the results of analyzing user satisfaction queries, including, at a minimum: a. User information b. Type of transaction c. Satisfaction statistics d. User recommendations e. SMC recommendations	A: Performed by M&O staff using office automation tools.	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a.　the development, modification, recording, and printing of graphic images b.　the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a.　simulates and displays an accountant's worksheet b.　enables revisions and calculations on the displayed worksheet's data c.　enables transfer of the worksheet data to database, word processing and graphics applications d.　enables printing of worksheet information.
SMC-8841#B	The SMC shall have the capability to generate detailed and summary user feedback analysis reports describing the results of analyzing user satisfaction queries, including, at a minimum: a. User information b. Type of transaction c. Satisfaction statistics d. User recommendations e. SMC recommendations	B: Full capability using office automation tools	C-MSS-91010	A	The MSS Office Automation word processing capability shall facilitate the: a.　preparation, revision, and recording of documents, messages, reports, and data b.　import, transformation, and editing of documents produced by other word processing packages c.　insertion of worksheet and graphic images into documents, messages, and reports d.　transfer of document, message, and report information to spreadsheet and graphics applications e.　printing of documents, messages, reports, and data

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-91030	A	The MSS Office Automation shall provide a graphics capability that enables: a. the development, modification, recording, and printing of graphic images b. the transfer of graphics images to word processing documents, messages, and reports.
			C-MSS-91020	IR1	The MSS Office Automation shall provide a spreadsheet capability that: a. simulates and displays an accountant's worksheet b. enables revisions and calculations on the displayed worksheet's data c. enables transfer of the worksheet data to database, word processing and graphics applications d. enables printing of worksheet information.
			C-MSS-92250	B	The MSS Report Generation Service shall be capable of generating a User Service Performance Report containing summary and detailed analysis of user feedback including: a. User information b. Type of transaction c. Satisfaction statistics d. User recommendations e. SMC recommendations
SMC-8860#A	The SMC shall have the capability to generate detailed and summary fault management reports describing the fault management of ground resources, including, at a minimum: a. Fault type and description b. Time of occurrence of fault c. Effect on system d. Status of fault resolution e. Fault statistics	A: Performed by M&O staff using office automation tools.	C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.
			C-MSS-57500	A	The Trouble Ticketing Service shall have a graphical user interface to support the entry and editing of trouble tickets.
			C-MSS-57510	A	The Trouble Ticketing Service shall provide the ability to automatically notify the originator of the trouble ticket of changes in status.
			C-MSS-57520	A	The Trouble Ticketing Service shall provide an Application Program Interface which supports integration of entry of trouble tickets by other packages.

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L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-57530	A	The Trouble Ticketing Service shall provide the ability to search historical and current trouble tickets by various criteria including keyword, user id, and trouble ticket ID.
			C-MSS-57540	A	The Trouble Ticketing Service shall provide the ability to forward trouble tickets from one organization to another to facilitate the escalation of trouble tickets (e.g. from DAAC to SMC).
			C-MSS-57550	A	The Trouble Ticketing Service shall provide the ability to maintain different trouble ticket statuses including: Open, Work-In-Progress, Closed, Archived.
			C-MSS-57560	A	The Trouble Ticketing Service shall provide the ability to search for trouble tickets relating to the same resource (equipment).
			C-MSS-57580	A	The Trouble Ticketing Service shall provide the ability to store the following minimum set of information : unique trouble ticket ID, status, description, associated resources, problem solution, originator, keywords.
			C-MSS-57590	A	The Trouble Ticketing Service shall integrate with the MSS framework to allow management and monitoring of its services.
			C-MSS-57600	A	The Trouble Ticketing Service shall allow entry of a trouble ticket by any registered user of the system.
			C-MSS-57610	A	The Trouble Ticketing Service shall provide the capability to generate reports from the its data.
			C-MSS-57620	A	The Trouble Ticketing Service shall allow output of reports to either the screen or printer.
			C-MSS-57630	A	The Trouble Ticketing Service shall provide customization features to allow sites to specify notification and escalation rules.
SMC-8860#B	The SMC shall have the capability to generate detailed and summary fault management reports describing the fault management of ground resources, including, at a minimum: a. Fault type and description b. Time of occurrence of fault c. Effect on system d. Status of fault resolution e. Fault statistics	B: Full capability - possibly automated using office automation tools.	C-MSS-60600	IR1	The MSS Fault Management Application Service shall have the capability to generate, on an interactive and on a scheduled basis, reports on performance/error data that it has been configured to collect.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92310	B	The MSS Report Generation Service shall be capable of generating a Fault Management Report containing summary and detailed information on fault management of ground resources including: a. Fault type and description b. Time of fault occurrence c. Effect of fault on system d. Status of fault resolution e. Fault statistics
			C-MSS-92320	B	The MSS Report Generation Service shall be capable of generating a Trouble Status Report containing statistics on the number of trouble tickets opened, closed, and in work at a site and the average time to close a trouble ticket over the reporting period.
			C-MSS-92330	B	The MSS Report Generation Service shall be capable of generating an Ethernet Errors Report graphically depicting Ethernet error statistics for a selected node in real-time.
			C-MSS-92340	B	The MSS Report Generation Service shall be capable of generating an SNMP Errors report graphically depicting SNMP error statistics in real-time for the selected network nodes.
			C-MSS-92350	B	The MSS Report Generation Service shall be capable of generating an SNMP Authentication Failures Report listing the management systems that caused an authentication failure on the operator selected node(s).
			C-MSS-92360	B	The MSS Report Generation Service shall be capable of generating an SNMP Event Log Report containing a chronological list of SNMP events which occurred over the report interval for the selected node(s).
			C-MSS-92370	B	The MSS Report Generation Service shall be capable of generating a Site Host Errors Report containing a statistical summary of the types of errors logged at each host at a site over the reporting period.
			C-MSS-92380	B	The MSS Report Generation Service shall be capable of generating an EMC Host Errors Report containing a statistical summary of the types of errors logged at each site over the reporting period.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8880#A	The SMC shall have the capability to generate detailed and summary security compromise reports indicating security compromises of ground resources and facilities, including, at a minimum: a. Security compromise type and description b. Time of occurrence c. Cause of security compromise d. Impact on system e. Status of security compromise resolution f. Security compromise statistics g. Results of security compromise risk analysis	A: Capabilities d, e, and g performed by M&O staff which generates reports using office automation tools. Rest is automated.	C-MSS-70700	IR1	The MSS Security Management Application Service shall have the capability to generate intrusion reports on the following: a. Login failures b. Unauthorized access to ECS resources c. Break-ins d. Viruses and worms
SMC-8880#B	The SMC shall have the capability to generate detailed and summary security compromise reports indicating security compromises of ground resources and facilities, including, at a minimum: a. Security compromise type and description b. Time of occurrence c. Cause of security compromise d. Impact on system e. Status of security compromise resolution f. Security compromise statistics g. Results of security compromise risk analysis	B: Automated - full capability	C-MSS-92700	B	The MSS Report Generation Service shall be capable of generating a Security Compromise Report listing occurrences of login failures, unauthorized accesses, breakins, viruses and worms indicating time, cause, impact, resolution status, and results of security compromise risk analysis.
			C-MSS-92710	B	The MSS Report Generation Service shall be capable of generating a Security Compromise Statistics Report containing cumulative frequency of violation occurrence statistics by type, site, day of week, and successful/failure.
			C-MSS-92720	B	The MSS Report Generation Service shall be capable of generating a Virus Detection Report containing statistics on detected viruses/worms in the selected network nodes and actions taken.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-70700	IR1	The MSS Security Management Application Service shall have the capability to generate intrusion reports on the following: a.　　Login failures b.　　Unauthorized access to ECS resources c.　　Break-ins d.　　Viruses and worms
SMC-8880#Ir1	The SMC shall have the capability to generate detailed and summary security compromise reports indicating security compromises of ground resources and facilities, including, at a minimum: a. Security compromise type and description b. Time of occurrence	This requirement is supported as follows: Ir1 shall provide DCE-based security, and shall provide OA tools for use by the operations staff for the purpose of preparing security reports.	C-MSS-70700	IR1	The MSS Security Management Application Service shall have the capability to generate intrusion reports on the following: a.　　Login failures b.　　Unauthorized access to ECS resources c.　　Break-ins d.　　Viruses and worms
SMC-8890#B	The SMC shall have the capability to generate detailed and summary accountability reports describing the results of accounting audits of ground resources, security, work-in-process, data, and users of the system.	B: Full capability	C-MSS-92270	B	The MSS Report Generation Service shall be capable of generating a Media Distribution Profile Report containing the statistical distribution of routine and user-requested products by electronic means and physical media type over the reporting period.
			C-MSS-92280	B	The MSS Report Generation Service shall be capable of generating a Data Orders Tracking Summary Report containing summary statistics on product order request dispositions over the reporting period.
			C-MSS-92290	B	The MSS Report Generation Service shall be capable of generating a Data Products Tracking Summary Report containing statistics on distribution of dataset orders by dataset type.
			C-MSS-92390	B	The MSS Report Generation Service shall be capable of generating a Ground Resource Availability Audit Report itemizing the occurrence of each resource outage, the reason for the outage, the duration, and the availability over the report interval.
			C-MSS-92400	B	The MSS Report Generation Service shall be capable of generating a Data Accountability Audit Report tracing a data item's status changes/ accesses over the reporting interval.
			C-MSS-92410	B	The MSS Report Generation Service shall be capable of generating a Pending Service Request Audit Report tracing processing events for requests currently in-progress.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-92420	B	The MSS Report Generation Service shall be capable of generating a User Activity Audit Report tracing a user's activity during a logon including products requested and files accessed.
			C-MSS-92430	B	The MSS Report Generation Service shall be capable of generating a Security Audit Report.
			C-MSS-92440	B	The MSS Report Generation Service shall be capable of generating a User Characterization Report containing user statistical summary information on number of new/ repeat accesses and summary information by product interest, mode of access, and affiliation.
			C-MSS-92450	B	The MSS Report Generation Service shall be capable of generating a System Access Profile Report containing statistics on distribution of user accesses by system service type over the selected reporting interval.
			C-MSS-92460	B	The MSS Report Generation Service shall be capable of generating a Utilization of User Services Personnel Summary Report depicting the distribution of user services requests by request type and method of contact over the report interval.
			C-MSS-92470	B	The MSS Report Generation Service shall be capable of generating a Storage Management Activity Report containing a list of storage management events for the selected start/stop time, intermediate operation, request ID, and staging resource.
			C-MSS-92480	B	The MSS Report Generation Service shall be capable of generating a Storage Management Inventory Update Report containing the log of storage management inventory update events for the selected reporting period.
			C-MSS-92490	B	The MSS Report Generation Service shall be capable of generating an Ingest History Report containing the log of ingest events selected by start/stop time, external data provider, data type identifier, and request status.
			C-MSS-92500	B	The MSS Report Generation Service shall be capable of generating an Ingest Error Report containing the log of ingest error events for the reporting period.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
SMC-8920#B	The SMC shall have the capability to generate detailed and summary reports indicating the financial accounting of ground segment resource utilization by ECS and external users, including, at a minimum: a. Account authorization and balances by users/groups b. Resource utilization costs by service rendered c. End-to-end cost accounting information by standard product d. User/group accounts payable/accounts receivable information	B: Full Capability	C-MSS-78550	B	The MSS BAAS Accounts Receivable (AR) function shall produce an end-of-period "trial balances" showing an account's opening balance, period activity, and closing balance.
			C-MSS-78560	B	The MSS BAAS Accounts Receivable (AR) function shall provide reports indicating summary of accounts receivable activity for a specific period.
			C-MSS-78570	B	The MSS BAAS Accounts Receivable (AR) function shall provide an exception report listing all accounts with credit balances.
			C-MSS-78580	B	The MSS BAAS Accounts Receivable (AR) function shall identify receivables which have been reduced by means other than cash collections (e.g., adjustments),
			C-MSS-78590	B	The MSS BAAS Accounts Receivable (AR) function shall produce an account receivable aging report.
			C-MSS-78600	B	The MSS BAAS Accounts Receivable (AR) function shall provide upon request a batch listing of all activity and items in a particular batch.
			C-MSS-78610	B	The MSS BAAS Accounts Receivable (AR) function shall provide upon request an account payment profile.
			C-MSS-78950	B	The MSS BAAS Accounts Payable (AP) function shall prepare detailed and summary listings of amounts payable for a specific period of time.
			C-MSS-78960	B	The MSS BAAS Accounts Payable (AP) function shall provide reporting of all unreconciled and outstanding items.
			C-MSS-78970	B	The MSS BAAS Accounts Payable (AP) function shall a provide vendor master list.
			C-MSS-79670	B	The MSS BAAS General Ledger (GL) function shall provide the capability to archive data needed for comparative analysis and presentation of historical information.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-79690	B	The MSS BAAS General Ledger (GL) function shall provide end-of-period reports (e.g., end-of-month, end-of-quarter, end-of-year).
			C-MSS-79900	B	The MSS BAAS Reporting function shall provide standard automated financial statements and summary reports.
			C-MSS-79930	B	The MSS BAAS Reporting function shall report data in accordance with accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by the Director of OMB.
			C-MSS-79940	B	The MSS BAAS Reporting function shall support the following report formats a. hard copy b. on-line inquiries c. extract data files d. disk
			C-MSS-79960	B	The MSS BAAS Reporting function shall maintain prior periods reporting data for future consultation and comparative analysis.
			C-MSS-79970	B	The MSS BAAS Reporting function shall provide the capability for the reformatting of reports to tailor a report to a user's specific needs.
			C-MSS-79980	B	The MSS BAAS Reporting function shall allow the transfer of information to other applications outside of the Billing/Accounting Application Service (BAAS).
			C-MSS-92550	B	The MSS Report Generation Service shall be capable of generating an Account Authorization Report containing authorized resource usage and current balance by user/ group.
			C-MSS-92560	B	The MSS Report Generation Service shall be capable of generating a Service Cost Schedule Report containing resource usage cost by service offered.
			C-MSS-92570	B	The MSS Report Generation Service shall be capable of generating a Standard Product Cost Schedule Report containing end to end cost accounting information by standard product.
			C-MSS-92580	B	The MSS Report Generation Service shall be capable of generating an Accounts Payable Report by user/ group
			C-MSS-92590	B	The MSS Report Generation Service shall be capable of generating an Accounts Receivable Report by user/group
			C-MSS-79880	B	The MSS BAAS Cost Accounting function shall provide reports assigning resource unit costs to identifiable processes.

L3 RbR ID	L3 RbR Text	Interpretation	L4 ID	Rel	L4 Rqmt Text
			C-MSS-79890	B	The MSS BAAS Cost Accounting function shall provide reports identifying resource unit costs traceable to particular science users/groups.

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